

# State of Washington Legislative Budget Committee

# Department of Information Services and Information Services Board Sunset Review

Report 95-10

October 16, 1995

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Established by Chapter 44.28 RCW, the Legislative Budget Committee (LBC) provides oversight of state funded programs and activities. As a joint, bi-partisan legislative committee, membership consists of eight senators and eight representatives equally divided between the two major political parties.

Under the direction of the Legislative Auditor, committee staff conduct performance audits, program evaluations, sunset reviews, and other types of policy studies. Study reports typically focus on the efficiency and effectiveness of agency operations, impact of state programs, and compliance with legislative intent. As appropriate, recommendations to correct identified problem areas are included.

Reporting directly to the legislature, the LBC generally meets on a monthly basis during the interim between legislative sessions.



# State of Washington Legislative Budget Committee

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# Department of Information Services and Information Services Board Sunset Review

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# DEPARTMENT OF INFORMATION SERVICES AND INFORMATION SERVICES BOARD SUNSET REVIEW

## Summary

his report is a sunset review of the Department of Information Services (DIS) and the Information Services Board (ISB). DIS and ISB are scheduled to terminate in June 1996, unless the legislature acts to repeal the sunset provisions. The report finds that the services and functions provided by DIS and ISB are necessary, apparently cost-effective, and should continue. However, the report recommends several modifications to DIS, ISB, and various DIS functions in order to address the problems that were found.

Overview

The report found shortcomings in the DIS process for evaluating information technology projects *proposed* by state agencies. Specifically, there seemed to be a lack of focus regarding proposed projects' justification as investment of taxpayers' money. Additionally, the report found that the oversight of *funded* agency information technology projects by DIS and the ISB should be strengthened. The report also found that DIS should provide more direction to state agencies in the planning and implementation of computer networks. The report makes several recommendations to address these issues.

Recommend continuation with modifications

#### BACKGROUND

The Department of Information Services (DIS) and the Information Services Board (ISB) were created in 1987, and their powers were broadened by the passage of the Information Technology Act of 1992. DIS provides computing and telecommunications services to other agencies. DIS, while functioning as staff to ISB, conducts and coordinates strategic planning for information technology,

develops statewide information technology policies, assesses funding requests, provides oversight of agency information system projects, and approves agency acquisitions.

ISB is comprised of nine voting members who are primarily directors of state agencies, and one non-voting member—the director of DIS. ISB's role is to develop standards governing the acquisition and disposition of information technology resources, develop statewide technical policies and standards, and provide direction concerning statewide information technology strategic planning.

State spent over \$1.2 billion on information technology in 1993-95 According to DIS, the 40 largest state agencies spent \$1.2 billion on information technology during the 1993-95 Biennium. DIS' 1993-95 budget was approximately \$180.6 million, which was funded primarily through fees paid by other state and local agencies purchasing DIS services. DIS was responsible for approximately \$146 million of state agency equipment acquisitions, and providing oversight to approximately \$72 million of agency spending on major information technology projects during the 1993-95 Biennium.

#### DIS SERVICES

The available evidence indicates that DIS computer and telecommunications services are cost-effective and competitive with the private sector, and should be continued. While some DIS services are comparable to services available in the private sector, there is evidence that "outsourcing" (contracting out) these services to the private sector would not result in cost savings or better service to the state.

#### STRATEGIC PLANNING

Under the Information Technology Act of 1992, agencies are required to develop strategic plans for information technology. ISB is to approve a DIS-developed state plan. Agencies are to produce biennial performance reports and DIS is responsible for a statewide performance report.

We found that the statewide strategic plan reflects emerging trends in information technology and is consistent with the statutory direction provided in the Information Technology Act. The Policy and Regulation Division (PRD) of DIS has been successful implementing this plan and responding to these emerging trends. Some agencies have the perception, however, that PRD and ISB may not have provided enough direction and support in other areas, particularly computer networks. We recommend that PRD explore methods of further assisting agencies with the planning and implementation of networks, and outline some options for doing this.

# STATE COMPUTER POLICIES AND STANDARDS

ISB is responsible under RCW 43.105.041 for developing statewide or interagency technical standards, policies, and procedures. ISB generally has adopted standards in all the areas mandated by statute. ISB has recently adopted new standards regarding the acquisition and disposal of information technology resources. This was an area of concern to state agencies. It is too early to tell whether these new standards will remedy the complaint that previous standards had been too cumbersome.

Also, current computer standards are identified as applicable to mainframes, minicomputers, and microcomputers alike. It is not necessarily clear, however, which parts of these standards are applicable to networks. We recommend that the ISB review its policies and standards to clarify which are applicable to computer networks.

# EVALUATION AND OVERSIGHT OF MAJOR INFORMATION TECHNOLOGY PROJECTS

### The Evaluation and Oversight Process

DIS is responsible for evaluation and oversight of "major agency information technology projects" (projects costing over \$3 million or 4 percent of an agency's budget, or projects for which oversight is requested by DIS, ISB, OFM, or the legislature) under the omnibus appropriation acts and in statute.

Standards for networks should be clarified The Policy and Regulation Division of DIS conducts a technical review of whether a project should be funded, once a feasibility study is completed.

Once funding is approved for design and construction, PRD and ISB project oversight occurs at several phases, including development of project agreements outlining expectations for the project, and conducting project reviews at "key decision points" to determine if funding should be released for later phases of the project. Additionally, DIS has the authority to terminate agency projects.

No statute specifically gives ISB oversight authority over major information technology projects. We recommend that ISB be given such authority.

### **Evaluating Proposed Projects for Funding**

This report found that the DIS process for evaluating agency budget requests for information technology projects is incomplete because it does not weight or quantify evaluation criteria. This makes it difficult to compare the relative merits of proposed projects. Furthermore, the DIS evaluation process does not consider whether the benefits of a project justify it as an investment of taxpayer's money.

Agency computer projects funded without quantified justification

While OFM and legislative staff may provide more of an investment perspective to the evaluation of agency budget requests, there is no centralized, systematic process for evaluating agency budget requests within OFM¹ or the legislature. The incomplete DIS evaluation process, combined with the lack of a centralized, systemmatic process for evaluating projects within OFM or the legislature, result in projects being funded without consistent and quantifiable justification.

The report recommends the legislature require DIS and OFM collaborate to systematically evaluate agency information technology project budget requests as investments.

<sup>&</sup>lt;sup>1</sup>OFM does provide a central budget review of all proposed information technology projects. However, this review does not use consistent criteria for evaluating projects.

#### Oversight of Information Technology Projects

Several Washington State information technology projects have encountered problems that have led to changes in project budgets, scope, and schedules. However, problems with information technology projects are not unusual, and the incidence of such problems within projects of Washington State agencies compares favorably to the rate of problems encountered among public agencies and private businesses throughout the country.

We reviewed the range and application of project oversight "tools" available to DIS and ISB. We found the range of tools to be adequate. We noted some delays and other problems in the use of some of the project oversight tools, and recommend that more effort be placed in using the available project oversight tools to resolve problems.

Project oversight by the Policy and Regulation Division of DIS and ISB has resulted in some projects undergoing changes which are consistent with sound management practices. However, we cannot say for certain that these changes have improved the "bottom-line" of projects. Further, we found that project oversight could be strengthened. For example, we found situations in which needed interventions in agency projects did not occur in a timely manner.

While the report makes recommendations aimed at strengthening the oversight *process*, we believe that changes to the *organization* of DIS and ISB may also be important for improvement of the project oversight function. DIS and ISB oversight over agency computer projects should be strengthened

### **ORGANIZATIONAL ISSUES**

We recommend that the legislature reauthorize DIS and ISB by repealing the sunset act sections terminating DIS and ISB.

The report suggests that changing the composition of ISB to include more private sector members experienced in the management of information technology may help to strengthen project oversight. Additional private sector members would make ISB more independent from the state agencies whose projects are under oversight, and would increase the board's expertise in information technology.

Recommend organizational changes to DIS and ISB The report also suggests that consideration should be given to separating the Policy and Regulation Division (PRD) of DIS, which provides staff to the ISB, from the remainder of the department, which provides computer and telecommunications services to state agencies. This separation would promote a more independent board, and eliminate the potential for conflict between the two major functions of DIS.

Finally, this report makes no recommendation regarding the proposal made by DIS during the 1995 Legislative Session to create a non-profit corporation to provide computer and telecommunications services. The report observes that the proposal would increase the flexibility of these services, but would reduce the accountability of those services to state government, particularly to the legislature. The report suggests that certain outstanding issues regarding the proposal be resolved if DIS intends to resubmit the proposal for the 1996 session.

# AGENCY RESPONSE AND AUDITORS' COMMENTS

Responses to this report from the Department of Information Services and the Office of Financial Management are included in Appendix 2. The auditors' comments on the responses are also included in Appendix 2. Both DIS and OFM concurred with seven of the ten recommendations of this report, partially concurred with two recommendations, and did not concur with one recommendation.

## **ACKNOWLEDGMENTS**

We wish to acknowledge the assistance provided to us by DIS staff, ISB, and information technology staff throughout state government.

This evaluation was conducted by Larry Brubaker and Bert Hoff. Ron Perry was the project supervisor.

> Cheryle A. Broom Legislative Auditor

On October 16, 1995, this report was approved as amended by the Legislative Budget Committee and its distribution authorized.

Senator Al Bauer, Chair

## RECOMMENDATIONS

### **Summary**

#### Recommendation 1

The Policy and Regulation Division of DIS should explore methods of providing further assistance to agencies in planning and implementing computer networks.

Legislation Required:

No

Fiscal Impact:

Minimal

Implementation:

Open

#### Recommendation 2

The legislature should consider amending RCW 43.105.052 to give the Policy and Regulation Division of DIS statutory authority to enter into master personal service agreements with individuals or firms with proven expertise in areas of information technology, including networking.

Legislation Required:

No

Fiscal Impact:

Minimal

Implementation:

Open

#### Recommendation 3

The ISB should review and clarify the applicability of policies and standards to computer networks.

Legislation Required:

No

Fiscal Impact:

None

Implementation:

Open

#### Recommendation 4

The legislature should amend Chapter 43.105 RCW to provide clear authority for ISB oversight over major information technology projects.

Legislation Required:

Yes

Fiscal Impact:

None

Implementation:

#### Recommendation 5\*

The legislature should amend RCW 43.105 to improve the process for evaluating agency budget requests for information technology projects. The legislature should require the evaluation process to include the following components:

- The DIS Policy and Regulation Division and OFM should institute a coordinated process for evaluating agency budget requests for information technology projects costing more than \$1.5 million.
- Requests for funding should be considered as proposed investments by the taxpayers
  of the state.
- The evaluation of funding requests should include a consistent methodology for weighting the various evaluation criteria in order to provide a comparison of the relative merits of evaluating the proposed projects.
- An appropriate measure of return on investment, generated from the required costbenefit analysis, should be an important criterion for evaluating proposed projects, but other statutorily-mandated criteria should also be used.
- The proposing agency should quantify the life cycle costs and benefits of alternatives to the proposed project, as well as the proposal itself.
- A summary of the results of the evaluation process that indicates for each proposed project's "score" for each of the evaluation criteria, the weighting of each of the evaluation criteria, and the overall project score should be transmitted to the fiscal committees of the legislature.

Legislation Required:

Yes Minimal

Fiscal Impact: Implementation:

<sup>\*</sup> Staff recommendation was modified by action of the Legislative Budget Committee on October 16, 1995.

#### Recommendation 6

DIS, OFM, and the other state agencies should make a more concerted effort to resolve project issues and execute a project agreement within the time frame specified in ISB standards. If satisfactory progress is not made toward resolution of project management issues within this time frame, OFM should consider requesting the agency suspend further expenditures until these issues are resolved.

Legislation Required:

No

Fiscal Impact:

None

Implementation:

Ongoing

#### Recommendation 7

When changes to a project result in a requirement for an amended project agreement, DIS and OFM should collaborate to re-evaluate whether the project continues to be justified. The re-evaluation of project justification should utilize the same process and criteria used in the evaluation of agency budget requests for information technology projects.

Legislation Required:

No

Fiscal Impact:

None

Implementation:

Ongoing

#### Recommendation 8

in this report) by repealing RCW 43.131.353 and RCW 43.131.354 (Sunset Act sections which terminate DIS and ISB).

Legislation Required:

Yes

Fiscal Impact:

None

Implementation:

1996 Legislative Session

#### Recommendation 9

The legislature should consider adding to the ISB private sector representatives who are experienced in the management of information technology.

Legislation Required:

Yes

Fiscal Impact:

None

Implementation:

#### Recommendation 10

The legislature should consider separating the planning/policy/oversight function of DIS from its services function. This could be accomplished by separating the Policy and Regulation Division from DIS services and creating an independent staff to ISB.

Legislation Required:

Yes

Fiscal Impact:

None

Implementation:

# INTRODUCTION

### **Chapter One**

his chapter provides an introduction to the roles and functions of the Department of Information Services (DIS) and the Information Services Board (ISB). It also provides an overview of this sunset report.

Summary

# OVERVIEW OF THE DEPARTMENT OF INFORMATION SERVICES AND THE INFORMATION SERVICES BOARD

In 1987, the legislature created the Department of Information Services (DIS) and the Information Services Board (ISB) to provide coordinated planning, management, and delivery of state information services. In 1992, the legislature increased DIS' oversight responsibilities through the passage of the Information Technology Act and mandated a strategic planning process. Prior to the creation of DIS, information services had been provided by several different state agencies. ISB replaced the Data Processing Authority, which had previously provided an oversight role. DIS and ISB are scheduled to terminate as of June 1996, under the Sunset Act.

DIS has two major functions: (1) it is a provider of computing, telecommunications, and bulk purchasing services to other agencies of state and local government on a full-cost recovery basis; and (2) as staff to the ISB, it conducts and coordinates strategic planning

DIS and ISB created to centralize planning and management

<sup>&</sup>lt;sup>1</sup>DIS is not the sole provider of information services among state agencies. Some agencies manage their own information systems, and the Washington State Patrol currently provides information services to the Department of Corrections. Also, some agency information systems are managed by private companies.

for information technology, develops statewide information technology policies, assesses funding requests, provides oversight of agency information system development projects, and approves agency acquisitions of information technology equipment.

# Roles of DIS and ISB

The ISB consists of nine voting members and one non-voting member (the director of DIS). Of the nine voting members, seven are appointed by the governor. The other two voting members are appointed by the legislative and judicial branches. One of the seven members appointed by the governor must be a representative from the private sector (the statute does not allow for more than two private sector members). The ISB is comprised primarily of state agency directors.

Among the duties of the ISB are: to develop standards governing the acquisition and disposition of equipment, software, and purchased services; to acquire equipment or delegate such authority to state agencies; to develop statewide technical policies and standards; and to provide direction concerning statewide strategic planning.

According to an estimate by DIS, the 40 largest state agencies spent \$1.2 billion on information technology during the 1993-95 Biennium. This includes salaries and benefits for information technology staff, purchase and depreciation of equipment, the costs of telecommunications, including telephone and data transmission, and purchased and personal services.

DIS's 1993-95 budget was approximately \$180.6 million, which is primarily funded through fees paid by other state and local agencies who purchase DIS services. This provided for approximately 426 FTEs. (The 1991-93 budget was approximately \$186.3 million and 490 FTEs.) DIS was responsible for approving approximately \$146 million of state agency equipment acquisitions and providing oversight for approximately \$72 million of agency spending on major information technology projects during the 1993-95 Biennium.

### OVERVIEW OF THIS SUNSET REPORT

This sunset report examines whether DIS and ISB should be continued. The scope and objectives of the study follow sunset review criteria. They are presented in Appendix 1.

In the course of this study we interviewed ISB members, DIS staff, and information technology professionals throughout state government and in the private sector. We reviewed DIS services and the roles of DIS and ISB in providing strategic planning, policy development, project evaluation, and project oversight. Further, we reviewed the project oversight process for 42 agency projects that were subject to oversight. The report is organized as follows:

- Chapter 2 examines the services provided by DIS.
- Chapter 3 examines statewide information technology strategic planning.
- Chapter 4 examines state computer policies and standards developed by DIS and adopted by ISB.
- Chapter 5 focuses on evaluation and oversight of information technology projects.
- Chapter 6 explores issues related to how DIS and ISB are organized.

# **DIS SERVICES**

### **Chapter Two**

he available evidence indicates that DIS computer and telecommunications services are cost-effective, competitive with the private sector, and should be continued. While some DIS services are duplicative of services that are potentially available in the private sector, it is questionable that "outsourcing" these services to the private sector would result in cost savings or better service to the state.

### **Summary**

#### **OVERVIEW OF DIS SERVICES**

DIS provides two major categories of services to state (and in some instances, local government) agencies. The DIS Computer Services Division provides information processing services to state agencies. The Telecommunications Services Division provides telephone, data transmission, and bulk purchasing services to state and local agencies.

#### **Computer Services Division (CSD)**

State agencies can choose to operate their computer applications on DIS computer systems.<sup>1</sup> Agencies develop the applications inhouse, or through the use of outside consultants. If an agency chooses to receive service through DIS, the application is run on a DIS computer, and DIS bills the agency for the cost of the information processing service. The services provided by CSD include printing,

Computer and telecom-munication services provided

<sup>&</sup>lt;sup>1</sup> DIS is a discretionary provider of services to state agencies. This means that agencies can choose DIS services, provide the service themselves, or contract with a private sector provider.

production of microfiche and microfilm, and facilities maintenance, in addition to basic computer processing. The 1993-95 Biennial Budget for the division was approximately \$60 million.

#### **Telecommunications Services Division (TSD)**

The TSD provides data transmission, local and long-distance (SCAN) telephone services, and bulk-purchasing services. These services differ from those provided by the Computer Services Division in that most telecommunications services are not provided by DIS directly. Rather, the TSD bundles together the data transmission, telephone, or equipment purchases of agencies into "market baskets" and obtains favorable pricing from private providers of service based on the size of the market basket. The 1993-95 Biennial Budget for the TSD was approximately \$102 million.

#### FINDINGS REGARDING DIS SERVICES

Based on the available evidence, it appears that DIS services are cost-effective and should be continued. Additionally, DIS customers are, in general, pleased with the quality of DIS services.

# Computer services cost-effective

### **Computer Services Division**

It is difficult to compare the costs of CSD services with other public or private providers of similar services. Different providers of information processing services "bundle" those services differently, so direct comparisons of cost are difficult without a detailed study that identifies a comparable unit of analysis.

To attempt such a comparison, we conducted a survey of rates of similar agencies in all 49 other states. We received responses from 21 states. However, because of the problems of incomparable billing methodologies, we were unable to reach any conclusions from these responses.

Our assessment that the available evidence indicates that DIS computer services are cost-effective is based on the following reasons:

- A private consultant report compared the cost of DIS mainframe computer services to other public and private providers of similar services. The study found that DIS computer services costs are among the lowest in their comparison group.<sup>2</sup>
- Recent private-sector bids to operate the Department of Licensing's major licensing processing application (LAMP) were higher than DIS's bid to operate the same application.<sup>3</sup>
- A recent Wall Street Journal article detailed problems encountered by several businesses and public agencies that had "outsourced" their computer services.<sup>4</sup>

#### **Telecommunications Services Division**

It is also difficult to directly compare the costs of TSD services to other public and private sector providers because of how those services are bundled. Our rate survey of other states did not produce information that could be used to draw a conclusion about how DIS's costs compared to other states.

Our assessment that the available evidence indicates that TSD services are cost-effective is based on the following factors:

 Private consultant studies indicate that rates for certain TSD services are among the lowest in the consultant's comparison group.<sup>5</sup> Telecommunication services costeffective

<sup>&</sup>lt;sup>2</sup> "Decision Support Center Results for State of Washington," Real Decisions Corporation, December 1990. The consultant study takes into account the lack of comparability in how services are billed in order to determine standard units of comparison.

<sup>&</sup>lt;sup>3</sup> Two of three private sector bids to operate LAMP were more costly than DIS's bid. The third bid, while less costly than DIS's bid, was unclear about whether all costs to operate LAMP were included in the bid. DIS and the Department of Licensing referred to this bid as "non-responsive."

<sup>&</sup>lt;sup>4</sup> "Rent-a-Techs: Hiring Outside Firms To Run Computers Isn't Always a Bargain," Wall Street Journal, May 18, 1995, p. A1.

<sup>&</sup>lt;sup>5</sup> DSC Data Network Evaluation, Real Decisions Corporation, 1991, and Voice Network Results for State of Washington, Real Decisions Corporation, March 1992.

- A 1993 U.S. General Accounting Office (GAO) study compared prices of software and hardware products obtained through certain states' and the federal government's bulk purchase (brokering) programs. The GAO study found that TSD had obtained the lowest price of any state or the federal government, for three out of ten software and hardware products that were considered in the study.<sup>6</sup>
- TSD does not provide most of its services itself, but rather bundles agency telecommunications service needs into market baskets, and obtains discounted rates. Through this bundling process, DIS is able to negotiate substantial discounts for state and local agencies. For example, DIS is able to provide longdistance telephone rates that are as much as 75 percent less than the standard individual rates for long-distance service by providers of long-distance service.

# CONCLUSIONS REGARDING DIS SERVICES

require contractual amendments.

customers are, in general, pleased with the quality of service provided by DIS. Although some DIS services (e.g., mainframe computing) could be provided by the private sector, it is not clear that terminating DIS would result in less costly or better service to state agencies. In fact, the evidence from the recent bids from private sector firms to operate the Department of Licensing's LAMP computer application, and the Wall Street Journal article suggest that such services might be more costly if procured from the private sector. Additionally, the Wall Street Journal article detailed several other problems associated with outsourcing computer services, including a reduction in service quality, the loss of control over computer systems, and less flexibility because service changes

DIS services are considered cost-effective and should continue. DIS

"Outsourcing"
DIS services
may not
reduce costs

<sup>&</sup>lt;sup>6</sup> Multiple Award Schedule, United States General Accounting Office, August 1993. The GAO study did not indicate how many states were surveyed.

<sup>&</sup>lt;sup>7</sup> This discount is based on rates for a small customer. It is likely that large agencies could negotiate rate discounts with private carriers directly. However, it seems unlikely that large or small agencies could negotiate discounts of the magnitude of those obtained by DIS. Additionally, since DIS provides this service, agencies do not have to utilize their own resources to negotiate rate discounts with private providers.

## STRATEGIC PLANNING

## **Chapter Three**

nder the Information Technology Act of 1992, agencies are required to develop strategic plans for information technology. ISB is to approve a DIS-developed state plan. Agencies are obligated to produce biennial performance reports, and DIS is responsible for a statewide performance report. DIS functions are performed by its Policy and Regulation Division (PRD).

Summary

We found that the statewide strategic plan reflects emerging trends in information technology, and is consistent with the statutory direction provided in the Information Technology Act. PRD has had success in implementing this plan and responding to these emerging trends, for example in its Kiosk and Internet information-highway initiatives.

Strategic plan consistent with statute

Some agency staff, however, stated that PRD and ISB may not have provided enough direction and support in other areas, particularly computer networks. We recommend that DIS explore methods of further assisting agencies with the planning and implementation of networks; we outline some options for doing this.

#### STATUTORY FRAMEWORK

The Information Technology Act of 1992 (codified into Chapter 43.105 RCW, Department of Information Services) requires DIS to prepare a state strategic information technology plan establishing a statewide mission, goals, and objectives for the use of information technology. The plan is to be developed under standards and policies established by the ISB and submitted to the ISB for review and approval. The plan is to be updated as necessary and submitted to the Governor and leadership of the appropriations committees.

Agencies are required to develop strategic information technology plans setting forth the agency's mission, goals, and objectives for information technology and explaining how these conform to the state information technology plan. The agency plans are to identify projects and resources required to meet the plan's objectives and, where feasible, estimate the schedule and funding required for these projects. Agency plans are to be submitted to DIS for review and approved by ISB.

Agencies are also required to submit to DIS a biennial performance report assessing progress toward implementing the agency's plan.¹ DIS must prepare a biennial state performance report, based on these agency performance reports. The statute requires this statewide report to assess progress towards implementing the state's plan; analyze the success or failure, feasibility, progress, costs, and timeliness of implementation of "major" information technology projects (generally, projects over \$3 million or four percent of an agency's budget); and identify benefits, cost avoidance, and cost savings generated by major information technology projects.

# PLANNING AND PERFORMANCE REPORT ACTIVITIES

In January 1993, ISB adopted a statewide strategic plan developed by the Policy and Regulation Division of DIS. We found that this plan is consistent with the statutory direction provided in the Information Technology Act, and reflects emerging trends in information technology. The four goals in this plan are to:

• Improve service delivery to the public through the use of information technology

<sup>&</sup>lt;sup>1</sup> The report is also to contain an inventory of agency information services, equipment, and proprietary software.

<sup>&</sup>lt;sup>2</sup> See Congressional Office of Technology Assessment, Making Government Work (1994), GAO, Perceived Barriers to Effective Information Resources Management (1992), GAO, Information Resources, Summary of Federal Agencies' Information Resource Management Problems (1992), GAO, Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology: Learning from Leading Organizations (1994). Audit staff also reviewed the "Enterprise Computing" section of Info World, a weekly magazine for information technology professionals, to identify trends in information technology.

- Make information more accessible through an affordable and widely-available communications infrastructure
- Use information technology to respond quickly to changing business requirements, and
- Invest in people, tools, methods, and partnerships that support agency missions through information technology in government.

We compared these goals and activities by DIS to implement the strategic plans, to emerging trends in information technology. Based on a review of the literature on information technology in government,<sup>2</sup> we identified several emerging trends. These emerging trends are:

- A shift away from sole reliance on large mainframe computer systems to a distributed client/server system relying on smaller computers distributed throughout an agency's offices and connected by local area networks (LANs) and wide-area networks (WANs.)
- An "open architecture" (as opposed to reliance on proprietary systems) that has the flexibility to accommodate changing needs, facilitate information exchange between agencies, and integrate emerging technologies.
- Implementation of smaller projects on an incremental basis, rather than through single high-cost projects that may take five or six years to implement.
- Closer integration of information technology into an agency's business practices, with a focus on not simply automating existing practices, but using information technology in efforts to change the way an agency does business.
- Efforts to make state information more accessible to the public.

The trends reflected in the strategic plan developed by PRD are consistent with the statutory direction provided in the Information Technology Act. The plan embodies all five of the emerging trends listed above. The Congressional Office of Technology Assessment State strategic plan consistent with emerging trends report, *Making Government Work*, praises Washington's strategic planning initiative, stating that "The state of Washington has an aggressive strategy to harness information technology to change and improve state government."

Agencies have prepared strategic plans as required by statute, and these have been approved by ISB. The Policy and Regulation Division has prepared a draft performance report for the 1991-93 Biennium, although this has not been released. It plans on producing the statutorily required performance report for the 1993-95 Biennium.

# ROLE IN SUPPORT OF EMERGING INFORMATION TECHNOLOGY TRENDS

#### **DIS Emerging Technology Initiatives**

The state has had some success in implementing the strategic plan and responding to the emerging information technology trends listed earlier. Its Kiosk project, which makes government information available at kiosks in places like shopping centers around the state, and its Internet World Wide Web site, which makes state information available on the so-called "information highway," demonstrate use of emerging technology to make more government information available to the public. ISB has promulgated statewide "internetworking" and "open architecture" standards.

# Insufficient PRD Assistance in Developing Computer Networks

Agencies
want more
assistance
in planning
and
developing
networks

Some of the agency personnel we interviewed questioned whether PRD and ISB have provided enough direction in implementing information technology strategies reflecting the emerging trends that are woven into the state's strategic plan. To cite one example, many agencies are moving toward distributed client/server processing through the establishment of local-area networks (LANs) and wide-area networks (WANs). They pointed out that they are more interested in assistance with networking issues than they are in emerging-technology projects, such as videoconferencing, the Kiosk project, and a presence on the Internet. Agency information

technology staff reported that PRD does not have the depth of experience in these areas, and has not been able to provide the kind of assistance that these agencies would find helpful.

Providing technical assistance in the planning and implementation of computer networks has not been a major emphasis for PRD, and the agency acknowledges that it may lack a depth of experience in this area. However, some agencies say they could use such support to implement this component of the state's strategic plan. There are many ways this could be done, short of building up in-house expertise in these areas. Other strategies which could be employed to assist agencies in these areas include:

- Facilitating and coordinating information exchange between agencies that are dealing with networking problems, for example by organizing and hosting monthly "roundtables," or encouraging agencies to benefit from each other's expertise and experience;
- Keeping track of consultants who have successfully provided agencies with assistance in these areas, and encouraging other agencies to talk to the agency that had successfully used the consultant;
- Adding visibility to LAN and WAN initiatives by clarifying the applicability of policies and standards to computer networks, as we discuss more fully in Chapter 4, Policies and Regulations.

#### RECOMMENDATION 1

The Policy and Regulation Division of DIS should explore methods of providing further assistance to agencies in planning and implementing computer networks.

DIS pointed out that it does not have the statutory authority to enter into master personal services agreements with pre-screened consultants with proven expertise in planning and implementing computer networks. Such authority would enable the Policy and Regulation Division to make this expertise readily available to agencies needing assistance in planning and implementing networks. Agencies informed us that they frequently need this expertise on short notice, and that going through a separate RFP process to obtain this expertise causes delays they can ill afford. We think that this suggestion has merit, because of the need and because of DIS's role in support of emerging technology trends.

Options for providing network assistance

Master personal services contracts could help DIS assist agencies

Chapter Three: Strategic Planning

#### RECOMMENDATION 2

The legislature should consider amending RCW 43.105.052 to give the Policy and Regulation Division of DIS statutory authority to enter into master personal service agreements with individuals or firms with proven expertise in areas of information technology, including networking.

# STATE COMPUTER POLICIES AND STANDARDS

## **Chapter Four**

IS and ISB are responsible for promulgating statewide policies and standards for information technology. The purposes of these statewide policies and standards are to promote the compatibility of information technology systems across agencies, provide guidance to agencies, and ensure that agency information technology acquisitions are consistent with agency and statewide strategic plans.

Summary

We found that the Policy and Regulation Division (PRD) of DIS is working to amend some of the regulations found most problematic by state agencies. We recommend that ISB clarify policies relating to local area networks in order to provide direction in this important area of the state's strategic plan.

# FINDINGS REGARDING DIS AND ISB POLICES AND STANDARDS

ISB is responsible under RCW 43.105.041 for developing statewide or interagency technical standards, policies, and procedures. This includes standards for the acquisition and disposition of equipment, proprietary software, and purchased services and standards for the confidentiality of computerized data. This statute also requires ISB to provide direction regarding statewide strategic planning goals and objectives, and to establish policies for periodic DIS review of agency performance.

Draft standards and polices are developed by the Policy and Regulation Division and presented to the ISB. ISB has generally adopted standards in all the areas mandated by statute. We DIS and ISB develop state standards for information technology discovered two areas of concern: acquisitions and networking. Each is discussed below.

In general, the agency officials we interviewed did not have complaints about the policies and standards. The only policy cited as placing an undue burden on an agency was the policy on acquisitions. PRD and ISB are aware of the issue. A revised policy on acquisition and disposal of information technology resources has been adopted by the Board, effective July 1, 1995. While it is too early for us to tell whether this adequately addresses agency concerns, some agency officials have indicated that the revisions are a step in the right direction.

The other area of possible concern is with respect to standards for computer networks. As mentioned, one current trend in information technology is away from sole reliance on mainframe systems and toward distributed processing, client/server architecture, and networks. ISB standards on computer architecture, security, disaster recovery/business resumption, and other areas are applicable to mainframes, minicomputers, and microcomputers alike.

Current standards are not specific to computer networks

These standards do not specifically identify the special needs of networks. It is not necessarily clear which parts of these standards are appropriate for networks. Several questions are outstanding. For example, have the existing standards taken into account the unique needs and requirements of networks? It would assist state agencies if ISB were to clarify exactly what requirements an agency should keep in mind in implementing a computer network.

#### RECOMMENDATION 3

The ISB should review and clarify the applicability of policies and standards to computer networks.

# EVALUATION AND OVERSIGHT OF MAJOR INFORMATION TECHNOLOGY PROJECTS

## Chapter Five

IS, ISB, OFM, and the legislature have different roles in the evaluation and oversight of state agency information technology spending. This chapter analyzes the processes for: (1) evaluating agency budget requests for *proposed* information technology projects; and (2) providing oversight of the development and implementation of funded projects.

Summary

### Findings Regarding Project Evaluation

We found that the DIS process for evaluating proposed agency information technology projects is incomplete, and does not involve a justification of projects as an investment of taxpayer's money. While OFM and legislative staff may bring more of an investment focus to the evaluation of projects, their review is limited by the lack of a centralized systematic process for evaluating projects within either OFM or the legislature, and the incomplete DIS evaluation process. The report recommends that the legislature require DIS and OFM collaborate to implement a systematic process for evaluating proposed projects. This process would involve a weighting and quantification of evaluation criteria, and would evaluate projects as investments of taxpayers' money.

DIS evaluation of budget requests incomplete

## **Findings Regarding Project Oversight**

The report found that although many information technology projects within Washington State government have suffered problems that result in scope, schedule, or budget changes, such problems are not unusual for information technology projects in the public and private sectors.

Also, while oversight of agency projects by the Policy and Regulation Division (PRD) of DIS and ISB have resulted in improvements to those projects, there is evidence that such intervention could have been more timely and more aggressive. The report recommends improvements to the oversight process. It suggests certain organizational changes to DIS and ISB may also result in improvements to project oversight (organizational issues are discussed and recommendations made in Chapter 6).

# THE PROJECT EVALUATION AND OVERSIGHT PROCESS

# Statutory Authority for Evaluating Projects for Funding

RCW 43.105.180 specifies that, on request from OFM, DIS shall evaluate agency budget requests for major information technology projects. It directs DIS to develop criteria for evaluating these budget requests, in consultation with OFM. Criteria are to include feasibility, consistency with state and agency strategic plans, consistency with agency goals and objectives, and costs and benefits. The legislature designates a project for oversight by making it subject to Section 902 of the Biennial Appropriations Act, as discussed below.

#### Statutory Authority for Project Oversight

Several statutory provisions govern oversight of projects once they are funded. They are as follows:

• Section 902 of the Biennial Appropriations Act requires agencies to submit a feasibility study and project management plan to DIS, OFM, and the legislature for each project identified in the appropriations act as subject to this provision. Agencies are required to submit status reports to these entities at "key decision points" specified in the project's management plan. Work is not to proceed until DIS and OFM approve these reports. Agencies are also required to submit written post-implementation reviews.

- RCW 43.105.190 requires DIS evaluation of "major information technology" projects' initial needs assessments, feasibility studies, and final project implementation plans based on available funding. Major information technology projects are those costing more than \$3 million or four percent of an agency's budget. The statute also requires project agreements between the agency, DIS, and OFM. Funding may occur on a phase-byphase basis.
- Section 49 of the Biennial Appropriations Act for transportation specifies that transportation-funded projects are subject to the requirements of RCW 43.105.190, and an additional requirement for a bi-monthly oversight and risk-management report.

Although the requirements of projects subject to oversight under the biennial appropriations act are somewhat different than those subject to oversight under RCW 43.105.190, the DIS/ISB oversight process for both categories of projects is the same.

#### Lack of Clear Authority for ISB Oversight Role

While the appropriations acts and statutes provide clear authority for PRD oversight over information technology projects, such authority is not clearly provided to ISB. However, ISB has assumed a useful project oversight role although there is not clear authority for this role.

#### RECOMMENDATION 4

The legislature should amend Chapter 43.105 RCW to provide clear authority for ISB oversight over major information technology projects.

### **Overview of Project Phases and Review Points**

#### **Evaluating Proposed Projects**

Projects are considered for funding based on a feasibility study. An agency may request an appropriation to fund the study or conduct a feasibility study within existing resources. This effort culminates in a feasibility study which analyzes costs and benefits and outlines

DIS and ISB provide oversight of large computer projects...

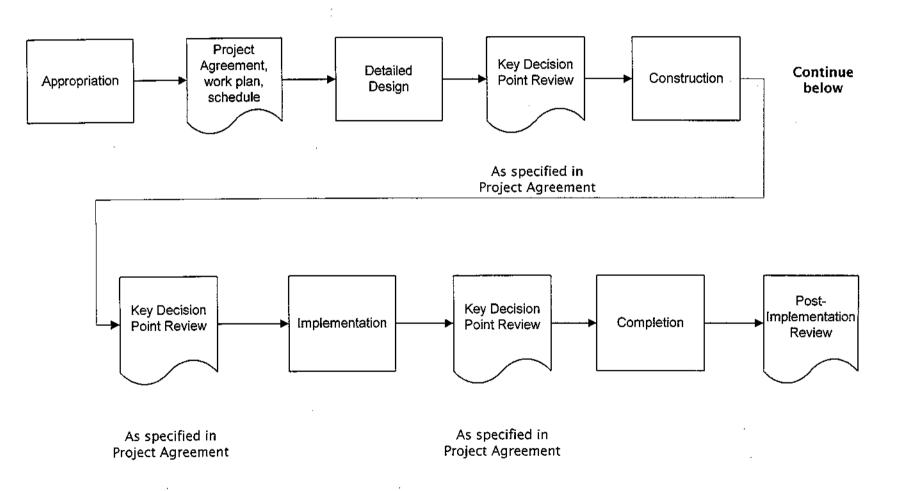
...however, no clear authority for ISB oversight role an estimated time frame and work plan. The feasibility study becomes part of the decision package for OFM and legislative review for funding the design, construction, and implementation phases of the project. The Policy and Regulation Division (PRD) uses statutorily-mandated criteria to evaluate the feasibility study and decision package. These statutory criteria include: technical feasibility; compliance with the agency and statewide strategic plans; support of the agency's business objectives; adequacy of estimations of the project's costs, benefits, and schedule; project management; and overall feasibility.

#### **Oversight of Existing Projects**

Once funding is approved, major projects are subject to DIS and ISB oversight. The flowchart on the next page outlines the stages of this oversight process. It highlights decision review points and the documents used in these reviews. Once the level of funding is established, the agency prepares a project agreement specifying the project's management plan, budget, and schedule. This is signed by the heads of the agency, DIS, and OFM. The project agreement also specifies project "key decision points." At these points the PRD prepares a "key decision point review" describing the project's status and making a recommendation as to whether funds of the next phase should be released. Typically, these reviews occur at the project's next stages; detailed design, construction, and implementation. When a project is completed, the agency prepares a post-implementation review.

## **Information Technology Project Phases and Review Points**

#### For Funded Projects \*



<sup>\*</sup> This process follows DIS, OFM and legislative review of a project feasibility study.

# **EVALUATING PROPOSED PROJECTS FOR FUNDING**

#### **Overview of Project Evaluation**

RCW 43.105.180 requires DIS, upon request of OFM, to evaluate agency budget requests for major information technology projects. The statute requires DIS to evaluate the feasibility of proposed projects, consistency with state and agency strategic information technology plans, consistency with agency goals and objectives, and projected costs and benefits. The DIS evaluations are used by OFM and legislative staff in their reviews of agency budget requests for information technology projects.

DIS evaluates technical merits of proposed projects... The primary document used when DIS is evaluating a budget request for funding design, construction, and implementation of a project is the project feasibility study. DIS uses the project feasibility study to evaluate the proposed project against the statutory evaluation criteria.

DIS evaluates whether each project rates "poor," "satisfactory," or "good" in relationship to each of the statutory criteria, with the exception of costs and benefits. For the costs and benefits criterion, DIS evaluates whether the approach used by the proposing agency to estimate project costs and benefits is poor, satisfactory, or good.

### **Shortcomings of the Evaluation Process**

#### **Process is Not Complete**

...however, evaluation process is incomplete While DIS assigns a rating of "poor," "satisfactory," or "good" to each of the evaluation criteria for each proposed project, this type of rating system does not result in a comprehensive comparison of the relative merits of different proposed projects. The ratings applied to each evaluation criteria are too general to allow for such comparisons among projects. Evaluation criteria are not consistently weighted. Therefore, there is not a consistent consideration of the relative importance of the various evaluation criteria.

OFM and legislative fiscal committee staff also evaluate proposed information technology projects. However, evaluation of proposed

projects by OFM and fiscal committee staff is conducted by the individual analyst assigned to the agency requesting the project. There is no centralized systematic review of all proposed information technology projects together, and there is no formalized process within OFM or the legislature for weighting, or applying decision criteria in order to prioritize proposed projects.

# Investment Focus is Lacking

DIS is required by statute to consider the costs and benefits of a project in evaluating agency budget requests. In fact, the DIS evaluation process does not consider whether a project is justified as an investment of taxpayers' money, but rather whether the methodology for estimating costs and benefits is reasonable.

While OFM and legislative fiscal committee analysts may bring more of an investment focus into their review of proposed projects, this review is limited by the lack of a centralized systematic process to evaluate the projects. It is also limited by the fact that DIS has not weighted or quantified the various evaluation criteria. The incomplete DIS evaluation process, combined with the lack of a centralized evaluation process within OFM or the legislature, makes it difficult for individual OFM or fiscal staff analysts to assess whether a project is justified from an investment standpoint. It is also difficult for OFM and fiscal committee staff to assess how the justification of a proposed project compares to other projects.

# Benefit of Evaluating Proposed Projects as Investments

A 1994 study by the U.S. General Accounting Office (GAO) attempted to determine those practices that are associated with successful information technology projects based on case studies of several public and private organizations. Among the practices identified by GAO as associated with successful projects are that information system projects should be managed as investments.

DIS does not consider whether a project is justified as an investment

No systematic review of projects within OFM or legislature

<sup>&</sup>lt;sup>1</sup> Improving Mission Performance Through Strategic Information Management and Technology, United States General Accounting Office, May 1994.

GAO states that:

Successful organizations evaluate projects as investments

"The investment focus systematically reduces inherent risks while maximizing benefits of complex projects... Conversely, without a centralized process to select, control, and evaluate information projects as investments, organizations confront a number of difficult problems..."<sup>2</sup>

GAO identifies specific attributes that are associated with managing projects as investments. Among these attributes are that there should be, "a disciplined process—based on *explicit decision criteria* and quantifiable measures assessing mission benefits, risk, and cost—to select, control, and evaluate information systems projects using post-implementation reviews."

# Implications of Not Systematically Evaluating Projects as Investments

In the previous sections we discussed the shortcomings of the DIS/OFM and legislative processes for evaluating proposed information technology projects, and described the GAO "best practices" for evaluating projects. This section discusses the implications of the shortcomings in the Washington State evaluation process.

The information and process needed (as described by GAO) to evaluate projects as investments do not fully exist in Washington State government. Without such a process, the information upon which decisions are made about whether or not to fund projects, is less complete and objective, and the benefits of a project may bear little relationship to its costs.

Following are some of the problems caused by the shortcomings of the current process:

# **Unclear Project Justification**

There are several projects currently underway in which the justification of the project as an investment of taxpayer's money is

<sup>&</sup>lt;sup>2</sup> Ibid, pages 28-29.

<sup>&</sup>lt;sup>3</sup> Ibid, page 28, emphasis ours.

unclear. Several major projects have received funding that have not identified quantifiable benefits in the feasibility study or project agreement. Often, rather than quantifying benefits of a project, the feasibility study will state that the primary benefit of a project is to enable the agency "to achieve its mission," or that the proposed project is "mission critical," without quantifying what "achieving its mission" means.

Enabling an agency to "achieve its mission" may be an adequate justification for a project. For example, enabling an agency to better achieve its mission may result in quantifiable time savings or cost savings to customers of the agency that result in a favorable return on the state's investment in the project, from the standpoint of the taxpayer. However, without quantifying the benefit of "achieving a mission", or the impact of not achieving the mission, it is difficult to determine whether the benefits of the project offset the costs.

Lack of Discipline in Estimating Costs and Benefits

Although DIS feasibility study guidelines require the study to include a cost-benefit analysis, the utility of such an analysis is questionable when the evaluation process does not involve a weighting of evaluation criteria. In the absence of weighted evaluation criteria, it is possible for projects to be recommended for funding without having to quantify benefits of the project. This is illustrated by the number of projects which have received funding that do not have quantified benefits.

For example, the following funded projects do not have quantified benefits in their feasibility studies:

- Department of Licensing's \$70 million Licensing Application Migration Project (LAMP)
- Department of Social and Health Services' \$3 million Service Tracking and Reporting System (STARS) project
- Department of Transportation's \$3 million Ferries Point of Sale (POS) Project

For other projects, the quantified benefits of the project are far outweighted by the costs. For example, the Department of Although project benefits not quantified...

...projects are funded

Employment Security's General Unemployment Insurance Development Effort (GUIDE) project has a \$25 million cost, but provides \$2.25 million in quantified benefits.

For still other projects, the benefits outweigh the costs, and represent a good return on the taxpayer's investment (presuming the costs and benefits of the project were estimated accurately). For example, the Department of Revenue's Revenue Accounts Management (RAM) project is estimated to return \$10 million in benefits against \$1.9 million in costs.

The shortcomings of the project evaluation process allow agencies to receive funding for projects which have no quantified benefits (which is not to say those projects are inherently unjustifiable). This allows for a lack of discipline in estimating the costs and benefits of projects, which may result in agency's neglecting to quantify benefits of projects that are quantifiable.

### **Process Discourages Quantifying the Benefits of Projects**

Since evaluation criteria are not weighted in order to compare the relative merits of projects, it has not been necessary for agencies to quantify the benefits of projects. Since it is not necessary to quantify project benefits in order for a project to receive funding, there is an implicit disincentive for agencies to identify such benefits. This is because, according to OFM and DIS, agencies perceive that OFM or the legislature will require that quantified benefits be "realized" (through budget cuts) upon project completion.

# Lack of Consideration of Alternatives

Also, project feasibility studies do not quantify the costs and benefits of alternatives to the proposed investment. For example, an agency may propose a \$5 million project (that may or may not have quantified benefits). It is not required in feasibility studies to quantify the costs and benefits of alternatives to the proposed project. For this hypothetical \$5 million project, possibly an alternative investment exists that generates 95 percent of the benefits of the proposal at a cost of \$1 million. Without a quantification of the costs and benefits of alternatives to the proposed project, it is impossible to determine whether the proposal is the most cost-effective solution to a problem.

Agencies perceive quantified benefits will result in budget cuts

Alternatives to proposed project not quantified

### Less Feasible Projects are not "Screened Out"

A more thorough process for evaluating projects as investments may result in large, costly projects being less justified from an investment standpoint than smaller projects. However, as mentioned in much of the literature we reviewed for this study, smaller projects tend to be more successfully implemented.

# Conclusions Regarding the Project Evaluation Process

The DIS/OFM project evaluation processes are incomplete and do not systematically consider proposed projects as investments. This can lead to several problems including unclear project justification, a lack of discipline in estimating project benefits, a disincentive for agencies to quantify project benefits, a lack of consideration of alternatives to the proposed project, and a process that may not screen out less feasible projects.

We conclude that an improved process is needed to systematically evaluate agency budget requests for information technology projects. The evaluation process should use quantified evaluation criteria, a process for weighting the various criteria, and the assignment of a "score" to each project based upon the application of the weighted evaluation criteria. An important criterion for evaluating proposed projects should be the project's return on investment. Projects that represent a good return on the taxpayer's investment should rank high in this evaluation process.

We recognize that whether a project is a good investment may not be the only reason for considering a project. For example, there may be a clear public policy reason for pursuing a project (e.g., an information system that centralizes criminal history information and makes it available to local law enforcement agencies) that may not result in a favorable return on investment. Such a project may not rank highly in an evaluation process that heavily weights a project's return on investment. This would not rule out projects that do not achieve a good investment return from being considered for funding. However, an evaluation process that considers projects as investments would require the proposing agency to clearly demonstrate the public policy purpose of projects that do not result in a favorable return on investment. We see this as a clear improvement over the current process.

Proposed projects should be systematically evaluated as investments

Benefits may include avoided costs or savings to customers... We also recognize that not all quantifiable benefits of a project will necessarily result in direct cost savings to state government. For example, a project that improves service to customers of a state agency may result in savings of time or money to the customer. These savings to customers while quantifiable, would not necessarily result in cost savings to the state agency proposing the projects. Nevertheless, such a project may be justified as an investment from the viewpoint of savings to the *taxpayers*, rather than savings to state government. We suggest that the quantification of project benefits should not be limited to direct cost savings to state agencies.

...as well as direct cost savings

We also conclude that DIS and OFM should coordinate the evaluation of agency funding requests for information technology projects. In this coordinated process it is envisioned that DIS Policy and Regulation Division staff would evaluate projects from a technical standpoint, while OFM staff would evaluate projects from a public policy/investment standpoint. The outcome of the coordinated process would be to develop a "score" that compares the relative merits of projects based on the application of the evaluation criteria. This "score" would be considered by the governor and the legislature in their deliberations of which agency projects should be funded.

Finally, we believe the improved evaluation process should apply to all projects costing \$1.5 million or more (rather than being limited to projects costing \$3 million, or four percent of an agency's budget, as under the current criteria). It seems prudent to require a rigorous evaluation process for projects that are estimated to cost \$500,000 or more.

### **RECOMMENDATION 5\***

The legislature should amend RCW 43.105 to improve the process for evaluating agency budget requests for information technology projects. The legislature should require the evaluation process to include the following components:

<sup>\*</sup> Staff recommendation was modified by action of the Legislative Budget Committee on October 16, 1995.

- The DIS Policy and Regulation Division and OFM should institute a coordinated process for evaluating agency budget requests for information technology projects costing more than \$1.5 million.
- Requests for funding should be considered as proposed investments by the taxpayers of the state.
- The evaluation of funding requests should include a consistent methodology for weighting the various evaluation criteria in order to provide a comparison of the relative merits of evaluting the proposed projects.
- An appropriate measure of return on investment, generated from an evaluation of the required cost-benefit analysis, should be an important criterion for evaluating proposed projects, but other statutorily mandated criteria should also be used.
- The proposing agency should quantify the life cycle costs and benefits of alternatives to the proposed project, as well as the proposal itself.
- A summary of the results of the evaluation process that indicates for each proposed project's "score" for each of the evaluation criteria, the weighting of each of the evaluation criteria, and the overall project score should be transmitted to the fiscal committees of the legislature.

# OVERSIGHT OF INFORMATION TECHNOLOGY PROJECTS

# Rate of Problems with Agency Projects

Several information technology projects in Washington have encountered problems that have affected the "bottom line"—whether projects are completed on time, on budget, and within scope. The rate of "bottom-line" problems seems to compare favorably to that encountered by other government agencies or the private sector.

Many projects incur cost overruns...

...but cost overruns are not unusual with computer projects We analyzed all 42 projects under DIS and ISB oversight since January 1992. Sixteen of these projects exceeded their original budget by an average of 37 percent. The total budget for these 16 projects was originally \$111.4 million. Budget increases totaled \$41.4 million. Twenty projects were delayed beyond their original schedule, and 14 were cut back in scope or terminated. A total of 31 projects (74 percent) encountered one or more of these problems.

These results compare favorably to results achieved in other government entities or in the private sector, according to a report by a consulting firm, The Standish Group International. It surveyed 365 respondents, representing 8,380 private- and public-sector applications. Some 31 percent of the projects were canceled. Another 53 percent cost an average of 189 percent of their original estimates. Only 16 percent were completed on time, within scope and within budget.

The focus of this section, however, is not on individual projects, but on the effectiveness of DIS and ISB in providing oversight to these projects. In the next two sections we discuss oversight tools and intervention strategies. We then assess the outcomes attained with these tools and strategies.

# **Findings Regarding Oversight Tools**

### Overview

Oversight statutes provide DIS with a range of oversight "tools," for example project agreements, key decision point reviews, reports to ISB and post-implementation reviews. Each of these provides ISB, OFM, and the legislature an opportunity to review the project's status. We found the range of tools to be sufficient. While we have some concerns about how some of these tools are used in practice, we make a recommendation on only one, the project agreement. Our recommendation, that these agreements be executed in a more timely manner, is in the concluding section of this chapter. We discuss each tool below. The next section discusses how these tools are used as part of project intervention strategies.

 $<sup>^4{\</sup>rm The\,Standish\,Group\,International}, Charting the Seas of Information Technology: Chaos (1994).$ 

### **Project Agreements**

Project agreement standards adopted by ISB specify that a project agreement is to be established after clear project estimates have been developed and project funding appropriated or granted. These standards state, "In most cases, the agreement will be prepared within 90 days of the appropriation or grant."

Project agreements are important to project success for the following reasons:

- As the ISB guidelines state, "the project agreement is the primary document that sets expectations for the project among the stakeholders,"
- Project agreements ensure the top-level executive involvement that has been recognized by several sources as crucial to project success,<sup>5</sup> and
- A project agreement indicates that an agency has been able to develop a specific, realistic work plan, schedule, and budget.

We found that project agreements were in place in all but one of the 12 1993-95 projects for which they were required. But signing of the project agreement was frequently delayed. In one \$2.3 million 1993-95 project, the project agreement had not been signed by mid-May 1995, when we completed our fieldwork. In a \$3 million project, the project agreement was signed 250 days after oversight began, about the time construction was completed and the project was moving into production. In another agency with two projects, totaling \$4.9 million, the project agreements were signed 196 days after the projects began.

Some delays occurred in executing project agreements

<sup>&</sup>lt;sup>5</sup> See The Standish Group International: Charting the Seas of Information Technology: Chaos (1994), Congressional Office of Technology Assessment, Making Government Work (1994), GAO, Perceived Barriers to Effective Information Resources Management (1992), GAO, Information Resources, Summary of Federal Agencies' Information Resource Management Problems (1992), GAO, Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology: Learning from Leading Organizations (1994).

There are individual reasons for each delay. For example, DIS, OFM, and the Department of Transportation reached agreement on the LAMP project in the fall of 1993, but resolution of concerns raised by the Legislative Transportation Committee delayed signing. Delay in the project agreement could also mean that some issue regarding executive involvement, project management, budget or schedule delayed signing of the agreement.

In their own oversight of consultants, agencies recognize the value of developing these specific and realistic work plans, schedules and budgets. In a number of projects we examined, an outside consultant was retained to do the work. The first task given to the firm awarded the project is usually to develop such a work plan and schedule. When the consultant is unable to negotiate a satisfactory work plan and schedule with the agency, the agency recognizes that the project is in difficulty. The ISB standard on project agreements simply requires of the agencies what many of the agencies require of their contractors.

We recommend that the agencies, DIS, and OFM put more focus on resolving the issues in project agreements early in the project, so that issues of executive-level involvement, project management, budget and schedule can be identified and resolved. The ISB standard of a project agreement within 90 days of grant or appropriation seems reasonable. Our recommendation is presented at the end of this chapter, where we state our conclusions regarding project oversight.

# Reports to the ISB

The Policy and Regulation Division provides project summaries and other reports to ISB at its meetings. These documents provide two important functions: they inform ISB on project status and add visibility to unresolved project problems. This increased visibility provides an additional incentive for agencies to resolve them.

DIS reports to ISB are sometimes incomplete It is not always clear that ISB is provided with all the information about problems in projects as they arise. We found several instances of project summaries mentioning for the first time significant events (e.g., removal of a project director) which had occurred up to six months earlier. In general, we found the key decision point reviews submitted to OFM to be thorough and detailed regarding problems a project might have.

The 1991-93 biennium-end summary presented to ISB also may not have accurately reflected the status of the projects. This summary listed 15 of the 17, 1991-93 projects under oversight. All were listed as on schedule and on or under budget. Our analysis of these 17 projects indicates that not all of these projects stayed within their original budget or met their original schedule. Four of these 17 exceeded their original budgets. Two projects were delayed. Three projects listed as completed had not completed all planned tasks by the end of the biennium. Regarding project scope, one project was abandoned, one did not complete its original scope, and one was implemented two months late (but 20 percent under budget) because of an increase in scope. Our concern is that ISB members, legislative staff, and others receiving the biennium-end summary may not have a full understanding of some of the problems these projects encountered.

### **Key Decision Point Reviews**

Key decision points of a project are first identified in a project's feasibility study, and finalized in the project agreement. These are usually associated with significant milestones in a project's development. Key decision point reviews are conducted by PRD at each point. PRD then recommends whether, and on what basis, funds should be released for the next phase of a project. These reviews describe project progress to date, reexamine the tangible and intangible benefits to be achieved, outline the schedule and explain schedule variances, explain budget variances and changes, and identify any problems that have arisen in the project. These reviews are submitted to OFM, with copies to the legislature. They are not reviewed or approved by ISB.

When problems have arisen in a project, this review serves as a vehicle for resolution of the problem. In general, we found the review memos provided a clearer, more accurate summary of a project's progress and problems than the project summaries presented to the ISB. We found evidence that in some projects they

More accurate information provided in key decision point review

<sup>&</sup>lt;sup>6</sup> The summary does not list the Labor and Industries Employer Accounting (EASE) project, the budget for which increased from \$2.7 million to \$3.1 million, and the implementation date delayed from January 1991 to January 1992. It also does not include a joint project by GA, OFM, and DIS to automate purchasing. This project was abandoned after bids came in at \$2.2 million rather than the anticipated \$1.4 million. \$119 thousand was spent prior to termination.

have worked as a vehicle to negotiate project changes to address problems that have arisen.

### **Post-Implementation Reviews**

Post-implementation reviews (PIRs) are required for all major information technology projects, under PRD guidelines. These guidelines specify that a PIR is required for all projects under oversight, and that this is to be done 12 to 16 months after project completion. These guidelines state, "Ideally, the PIR should be conducted by an objective third party such as a private contractor, the State Auditor's Office, internal auditor, or other neutral party."

Quality of post-imple-mentation review is mixed

Reviews were completed in eight of the 20 projects completed in the 1991-93 Biennium, and no post-implementation review was done in three. DIS informs us the others are due between June 1995 and January 1996. These dates are well outside the 12- to 16-month timeframe specified in PRD guidelines. Our review shows that the quality of these documents is mixed. Thus, their usefulness in documenting results achieved or in providing "lessons learned" for future projects is open to question.

# **Conclusions Regarding Oversight Tools**

We found that the range of oversight tools available to PRD and ISB to be adequate, although we found some limitations in how these tools were used. In the next section we will examine what project interventions occur, and whether these interventions are effective in keeping projects on track.

# Findings Regarding Project Interventions

# Intervention Strategies

The PRD's initial strategy, if problems arise in a project, is to work with the agency to offer whatever informal advice and assistance it can. If this does not resolve the issue, there are three other courses available. First, the PRD can report on the situation to ISB. Reporting the problem to ISB, and having the agency director appear before ISB, lends visibility to the issues and encourages the agency director to attempt to resolve them. Second, PRD can recommend to OFM during the key decision point review process

that funds for the next stage of a project not be released until specified actions are taken. **Third**, the PRD can recommend project termination or suspension.

While RCW 43.105.190 specifies that the director of DIS may terminate a project if the director determines that a project is not expected to meet performance standards, in fact all recommendations for action on a project are made to the ISB. For example, PRD recommended that the DSHS Social Services Payment System (SSPS) be terminated if it could not develop an achievable project plan.<sup>7</sup>

# Changes to Projects Resulting from DIS/ISB Interventions

In our review of project summaries and other documents provided by DIS, we found at least 12 instances where PRD had made a difference in a project. For example, L&I implemented DIS and OFM recommended quality-control changes and management changes in L&I's Safety and Health Information System 2 (SHIMS-2) project.

In other instances, PRD had made recommendations, but action was delayed. In some instances, the PRD project summaries recommended a specific action be taken for several months before action was finally taken to resolve the problem.

The example of PRD and ISB intervention cited most often is on the Department of Employment Security's GUIDE project. The evidence on this seems to be mixed. ISB acted to suspend this project in July 1993, and to reinstitute it only if there were better planning and management controls. After the Department of Employment Security responded to these concerns, ISB approved restarting the project, and it is reported to be back on track.

However, the project budget had grown from \$2.6 million in 1989 to \$8.7 million at the start of the 1991-93 Biennium and to \$13.4 million by the time it was halted. In July 1992, ISB supported the decision to continue the project, but required a briefing at each ISB meeting. Between that time and May 1993, an additional \$4.3 million had been expended, bringing total expenditures to \$10.1 million. When the project was resumed, the 1993 legislature

Interventions not always timely

<sup>&</sup>lt;sup>7</sup> The project developed a plan on time and was not terminated or suspended.

appropriated an additional \$8.3 million per a request reviewed by DIS and approved by OFM. The total project budget is now \$24.8 million. If intervention had been more timely, perhaps the expenditure of an additional \$4.3 million between July 1992 and May 1993 might have been avoided.

# Changes to Projects do not Involve a Reevaluation of Project Justification

Despite budget increases... During the oversight process, when changes are being considered to a project's scope, schedule, or budget, the consideration of those changes does not include an evaluation of whether a project continues to meet its original justification. For example, the Department of Employment Security's GUIDE project had an original cost of approximately \$2 million and was estimated to provide approximately \$2.25 million in quantified benefits. Currently, GUIDE is anticipated to cost \$25 million, and the justification of the project appears questionable because the project costs far outweigh the quantified benefits.

The existing process for review and approval of changes to a project's scope, schedule and budget does not include a reevaluation of whether a project continues to meet its original justification.

# Conclusions and Recommendations Regarding Project Oversight

The evidence indicates that project oversight has resulted in changes in some projects. While we cannot say with certainty that these changes have affected the project's "bottom line," we do note that the changes are generally consistent with sound practices in information technology management.

Our overall conclusion, however, is that oversight could be strengthened. In the GUIDE project, for example, ISB appeared reluctant to consider suspending the project when it was obviously in difficulty. In other instances, recommendations to hire a project manager or to develop a realistic work plan and budget were not acted upon for three months, six months, or longer.

The recommendations made below are intended to improve the oversight process. We believe however, that organizational changes to ISB and the Policy and Regulation Division of DIS may do more to strengthen oversight than would changes to the oversight

...no reevaluation of project justification

Project oversight could be strengthened process itself. Organizational changes to strengthen the PRD and ISB role are presented in the next chapter.

# **Timely Project Agreements**

We believe that more attention should be paid to developing project agreements early in the project. Failure to have a project agreement may be a first sign that an agency is having difficulties resolving issues of ensuring top level executive involvement in the project, resolving project management issues, or developing a realistic project work plan and schedule. Current ISB standards specify that a project agreement should be signed within 90 days of the time an appropriation is made and the project begins. If agreement is not reached within this time frame, DIS and OFM should examine carefully whether satisfactory progress is being made toward resolution of outstanding issues. If not, further funding of the project could be delayed until outstanding issues are resolved.

### RECOMMENDATION 6

DIS, OFM, and the other state agencies should make a more concerted effort to resolve project issues and execute a project agreement within the time frame specified in ISB standards. If satisfactory progress is not made toward resolution of project management issues within this time frame, OFM should consider requesting the agency suspend further expenditures until these issues are resolved.

# Re-evaluation of Project Justification

When there is a substantial change in a project's budget, DIS guidelines require that the project agreement be amended. As noted above, there is no reevaluation of the justification of a project when substantial changes occur to a project's scope, schedule, or budget.

# RECOMMENDATION 7

When changes to a project result in a requirement for an amended project agreement, DIS and OFM should collaborate to reevaluate whether the project continues to be justified. The reevaluation of project justification should utilize the same process and criteria used in the evaluation of agency budget requests for information technology projects.

# DIS AND ISB ORGANIZATIONAL ISSUES

# **Chapter Six**

he findings of the previous chapters suggest that the functions provided by DIS are cost-effective, necessary, and should continue. A recommendation to continue the DIS/ISB functions is made in this chapter. Chapter 5 of the report details problems with the process for evaluating information technology projects, and suggests that the DIS/ISB project oversight process should be strengthened. Other recommendations of this report are aimed at improving the project evaluation and oversight processes.

Summary

However, improvements to the DIS/ISB project oversight process may be realized through changes to the *organization* of DIS and ISB, as well as through changes to the project oversight *process*. This chapter suggests that the legislature should consider increasing the private sector membership of ISB, and should consider separating DIS's Policy and Regulation Division from DIS, in order to promote improvements in the project oversight process.

Finally, DIS proposed during the 1995 Legislative Session to create a not-for-profit corporation to provide the computer and telecommunications services functions to state and local government agencies that are currently provided by DIS. The purpose of the proposal is to promote additional flexibility and competitiveness of these services by removing them from state government. Our assessment is that there are benefits to providing this additional flexibility, however these benefits are achieved by reducing the accountability of DIS. This report does not make a recommendation regarding the DIS not-for-profit proposal, but suggests that certain issues be resolved if DIS intends to resubmit the proposal during the 1996 Legislative Session.

# SUNSET OF DIS AND ISB

In previous chapters, this report concluded that DIS service function is cost-effective, competitive with the private sector, and should continue. We also concluded that the planning/policy/oversight functions of DIS and ISB, while needing improvement, are necessary and should continue.

### RECOMMENDATION 8

The legislature should reauthorize DIS and ISB (subject to the modifications recommended in this report) by repealing RCW 43.131.353 and RCW 43.131.354 (Sunset Act sections which terminate DIS and ISB).

# **COMPOSITION OF THE ISB**

The ISB consists of nine voting members and one non-voting member (the director of DIS). Of the nine voting members, seven are appointed by the Governor. The other two voting members are appointed by the legislative and judicial branches. Only one of the seven members appointed by the Governor must be a representative from the private sector. The ISB tends to be comprised primarily of state agency directors.

Many of the people who were interviewed for this study, including some members of ISB itself, suggested that ISB is too heavily weighted with insiders to state government. There is a concern the state agency "insider" composition of ISB discourages the provision of a strong oversight role. The theory is that a board comprised primarily of members of the executive cabinet are less inclined to take strong action to intervene in problematic agency projects, because such actions would be embarrassing to fellow cabinet members whose projects are under ISB oversight.

ISB may be strengthened with more private sector members

It has also been suggested that since the ISB is primarily comprised of state agency directors, there is a lack of expertise in information technology management on the board. The lack of expertise in information technology management may also result in less proactive oversight of agency projects. This is because board members may not have sufficient expertise to question decisions made by project managers of projects under oversight.

Some boards in other states providing similar functions include substantially more private sector representation than ISB. For example private sector members form the majority of the state of Colorado's Information Management Commission.<sup>1</sup>

We have no way of assessing the impact of changing the composition of the ISB. However, we believe increasing the private sector membership of ISB with persons having technical and management expertise (such as a corporate chief information officer) could improve the effectiveness of the board by making it more independent of state agencies and knowledgeable about information technology issues.

Because the board would be more independent of state government and more technically aware, the ISB might be more proactive intervening in problematic projects. Chapter 5 of this report identified instances in which it appears that ISB should have been more proactive and timely in its oversight role.

### RECOMMENDATION 9

The legislature should consider adding to the ISB private sector representatives who are experienced in the management of information technology.

# ORGANIZATIONAL "LOCATION" OF THE PLANNING/POLICY/OVERSIGHT ROLE OF DIS

It has been suggested that locating the planning/policy/oversight function (the Policy and Regulation Division of DIS) within the same organization that provides information technology services to other agencies creates a potential conflict between these roles. This potential conflict was the subject of a 1992 study by the Legislative Service Center, which indicated that the trend in state government is to separate the information technology planning/policy/oversight function from the service provision function.

<sup>&</sup>lt;sup>1</sup> According to a January 1995 survey by the National Council for State Legislators.

<sup>&</sup>lt;sup>2</sup> "Information Systems Structure and Standards: A Synopsis of National Trends With Recommendations for Washington State Government", Washington State Legislative Service Center, February 1992.

DIS as service provider...

...may
conflict
with
planning,
regulation,
and
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role

The potential conflict between the major functions of DIS could be realized in several different ways. For example:

- DIS could propose policies for ISB adoption that make it difficult for agencies to receive information services from another provider.
- There could be pressure for DIS to be less assertive than it would otherwise be in its oversight of agency projects in order to not offend agencies that are also customers of DIS, and from which DIS relies on for its revenue.
- The ISB relies on DIS staff to provide analysis concerning information technology issues under consideration by ISB. Some of the issues under consideration by ISB directly impact the services provided by DIS. The fact that analysis provided by DIS to ISB can impact the services provided by DIS creates a concern about the objectivity of the analysis provided by DIS.

We were able to find little direct evidence that the potential for conflict has, in fact, been realized. The evidence we did find is summarized below:

- While certain policies proposed by DIS and adopted by ISB appear to favor service provision by DIS, customers of DIS did not express concern that such policies are intended to "steer" customers to DIS services.
- We found (as mentioned in Chapter 5) that DIS reports to ISB on the status of agency projects under oversight do not always mention all of the problems associated with a project. However we cannot link these inaccuracies in project status reports to a desire to not offend major customers of DIS.
- We found errors that favored DIS services in a recent analysis conducted by DIS on behalf of ISB. This analysis concerned whether to locate the Department of Licensing's large licensing processing application (LAMP) at DIS (where it is currently housed), at the Washington State Patrol's mainframe computer (as was proposed by the Legislative Transportation Committee), or at a private sector vendor. The analysis conducted by DIS considered the costs and benefits of the alternative locations for

LAMP. Certain errors were made in this analysis that made locating LAMP at DIS appear more favorable than it actually  $is.^3$ 

We do not consider the evidence identified above as conclusive that the potential conflict between the major roles of DIS creates substantial problems. However, we believe the errors in the analysis concerning the location of LAMP is illustrative of this conflict. We would not characterize the errors that were made as major flaws to the analysis, and do not dispute the bottom-line conclusions of the studies. Additionally, after discussing the studies with DIS staff, we believe that DIS staff attempted to be objective in conducting this analysis. Nevertheless, when honest mistakes were made, these mistakes tended to favor the provision of services by DIS.

While we did not find compelling evidence of the realization of the potential for conflict between the major functions of DIS, this situation may be quite subtle and difficult to prove. We believe there are reasons to give consideration to creating an organizational separation between the services and planning/policy/oversight functions without compelling evidence of the realization of conflicts between these roles.

In the previous section we recommended the legislature should consider increasing the private sector membership of ISB. The reason for this recommendation is to create an ISB that is more independent of state government and the agencies whose projects are under ISB oversight. Separating the DIS Policy and Regulation Division, which provides staffing to ISB from DIS services would promote greater independence of ISB.

### RECOMMENDATION 10

The legislature should consider separating the planning/ policy/oversight function of DIS from its services function. This could be accomplished by separating the Policy and Regulation Division from DIS services and creating an

Separation

promote

may

more

of functions

independent staff to the ISB.

independent **ISB** 

<sup>&</sup>lt;sup>3</sup> DIS has acknowledged one of the two errors that were found.

# DIS NON-PROFIT CORPORATION PROPOSAL

DIS and the Governor submitted legislation (HB 1642, SB 5672) for the 1995 Legislative Session that would authorize the creation of a state-owned non-profit corporation. The purpose of this corporation would be to provide the computer and telecommunications services that are currently being provided by the DIS Computer Services and Telecommunications Services divisions.

As a separate organization, DIS services would no longer be subject to state personnel or procurement policies, and would not be subject to the executive and legislative budget processes. The corporation would be governed by a board of directors appointed by the Governor. In a position paper DIS described the benefits of this proposal as creating additional flexibility in the provision of services, streamlining government, and providing greater opportunities for partnerships with the private sector.

Because this proposal was being considered by the legislature during the course of this sunset review, we did not conduct an exhaustive evaluation or make a recommendation concerning the proposal. However, we did consider some of the pros and cons of the proposal, as well as some additional issues that may be of interest to the legislature. We make the following observations:

- A primary benefit of the proposal, from DIS' standpoint, would be to remove DIS from the across-the-board budget and FTE cuts that have characterized the last few budget cycles (DIS was required to eliminate over 60 FTEs for the 1993-95 Biennium). DIS argues that as a service agency, funding and staffing for these services should reflect the demand for them. The nonprofit proposal would free DIS services from the budgeting process and allow the corporation the flexibility to provide services that are desired by its customers, and add or reduce FTEs accordingly.
- Removing DIS services from the state bureaucracy would provide additional flexibility to the corporation by removing it from procurement and personnel rules, for example. However, these rules were created in order to promote fair and consistent hiring and procurement practices. Creation of a non-profit organization

Creating a non-profit corporation may increase flexibility... that is not subject to these rules would reduce the accountability of the organization while providing this additional flexibility.

• Creating a non-profit corporation that is governed by an independent board of directors would reduce the accountability of the agency to the rest of state government, particularly to the legislative branch. The legislature would have very little say in decisions regarding what rates DIS services should charge, how many FTEs it should employ, or what services it should provide. On the other hand, this reduction in accountability is what creates the additional flexibility for the non-profit corporation.

...but would reduce accountability to the legislature

# Unresolved Issues Regarding the Non-profit Proposal

There are two major issues that have not been resolved regarding this proposal. These issues are:

- Should the non-profit corporation pay for the assets currently held by DIS?
- DIS is a preferred provider of services to state agencies (meaning that agencies do not have to follow a competitive procurement process to utilize DIS services). Should the non-profit corporation also continue to be a preferred provider of services to state agencies?

We understand that a private consulting firm may be retained by DIS to assist in further refining DIS's non-profit corporation proposal. We suggest that exploration of these issues be included in the consultant's report, and that a proposed resolution of these issues be reached if DIS intends to resubmit the non-profit proposal for the 1996 Legislative Session.

# **SCOPE AND OBJECTIVES**

# Appendix 1

### SCOPE

This review examines the Department of Information Services and Information Services Board. Under RCW 43.131.353, these agencies are scheduled to terminate on June 30, 1996, unless reauthorized by legislative action.

### **OBJECTIVES**

- 1. Have the Department of Information Services and the Information Services Board complied with legislative intent?
- 2. Have the Department of Information Services and Information Services Board operated in an efficient and economical manner which results in optimum performance?
- 3. Have the Department of Information Services and Information Services Board provided a needed service that should be continued or modified?
- 4. Do the Department of Information Services and Information Services Board duplicate the activities of other state agencies or the private sector?
- 5. Would termination or modification of the Department of Information Services and Information Services Board adversely affect the public health, safety or welfare?

# **AGENCY RESPONSE**

# **Appendix 2**

- Department of Information Services
- Office of Financial Management
- Auditors' Comments



#### STATE OF WASHINGTON

### DEPARTMENT OF INFORMATION SERVICES

Olympia, Washington 98504-2441

September 22, 1995

RECEIVED

Cheryle Broom, Legislative Auditor Legislative Budget Committee 506 East 16th Street Post Office Box 40910 Olympia, Washington 98504-0910

SEP 2 2 1995 LEGISLATIVE BUDGET COMM

Dear Ms. Broom:

Thank you for the opportunity to respond to the preliminary report of the sunset review of the Department of Information Services (DIS) and the Information Services Board (ISB). The report finds that the services and functions of DIS and ISB are necessary, cost-effective, and should continue. We agree with this determination.

While the report finds that DIS generally meets its legislative mandates, it suggests improvement in the operations of both DIS and ISB. In the attachment, we respond point by point to the recommendations contained in the report. Two of these recommendations, however, are of special significance.

The first is the recommendation that information technology projects be viewed as an investment of taxpayer funds and that project benefits be quantified. We take it as a fundamental principle that information technology projects should return real and measurable benefits to the people of Washington State. We will work with the ISB to strengthen our already substantial investment analysis of new proposals.

The second is the unique opportunity which the sunset review provides to address organizational issues. The questions of collocation of policy functions and services within DIS, and the formation of alternative organizational structures (including the proposal to move DIS services to a nonprofit corporation) should receive full and careful consideration by all interested executive and legislative stakeholders. Your report sets the stage for an examination of how to organize information technology services to best position the state of Washington to take advantage of computer and telecommunications technology in the future. We are now beginning to work on an analysis of options for organizational structures that address the issues presented in the preliminary sunset report. When these are sufficiently developed, we plan to share them with you, Legislative Budget Committee (LBC) members, and other interested legislators.

and Olivery

Cheryle Broom, Legislative Auditor September 22, 1995 Page Two

We are pleased that the sunset review confirms our belief that the services DIS provides its customers are cost-effective, competitive, and of high quality. We wish to acknowledge your staff for their constructive and professional approach to this engagement. They did a fine job of researching issues that were often technical and sometimes complex.

Sincerely,

Steve Kolodney

Director

SK:SH:djd attachments

# Summary of DIS and ISB Response to LBC Preliminary Sunset Review Report

Recommendation	DIS & ISB Position	Comments
1 - PRD should further assist agencies with network planning and implementation.	concur	PRD currently provides much of the assistance recommended in the report.
2 - PRD should execute master contracts for personal services.	disagree	OFM oversight of consultant contracting provides necessary accountability.
3 - ISB should clarify its network policies.	concur	
4 - ISB should have clear authority for oversight of IT projects.	concur	
5 - The process for evaluating agency budget requests should be revised.	partially concur, partially disagree	More rigorous financial evaluation of projects from an investment perspective would be valuable. Review of small projects and numeric ranking of all proposed projects is inappropriate.
6 - Project agreements should be executed promptly or funds should be suspended.	concur	
7 - The amendment of project agreements should trigger reevaluation of project justification.	concur	
8 - DIS and ISB should be re- authorized and the sunset provisions repealed.	concur	Re-authorization of DIS should be for an indefinite period.
9 - More private sector members should be added to the ISB.	concur	·
10 - Consideration should be given to separating PRD from DIS services functions.	concur that the issue deserves consideration	The state should consider how best to organize its IT functions to serve citizens in the 21st Century.

### Response to LBC Sunset Review Preliminary Report

The Legislative Budget Committee's (LBC) audit of the Department of Information Services (DIS) and the Information Services Board (ISB) concludes that both are in compliance with legislative intent, are operating in an efficient and economical manner, and should be continued. With respect to the services component of DIS, which represents more than 95% of the agency's budget and FTEs, the auditors express satisfaction with the cost-effectiveness, competitiveness, and quality of work performed. The report introduces an opportunity to examine how to best organize information technology to support state services as the 21st Century approaches. DIS and ISB responses to the specific recommendations are combined below.

#### "Recommendation 1

The Policy and Regulation Division of DIS should explore methods of providing further assistance to agencies in planning and implementing computer networks."

### Response

DIS agrees that assisting agencies as they deploy network technology is an important role, and that the mechanisms suggested by the report are effective ones; coordinating information exchange, providing access to technical resources, and leading through policy statements.

The Policy and Regulation Division (PRD) presently offers state agencies a range of services similar to those recommended by the report:

- 1. <u>Technical literature</u>. The PRD library contains considerable information on a wide range of network issues. A full-time professional librarian is available to assist PRD's clients in locating useful resources on network and other information technology topics. He distributes information to many agencies electronically and in hard copy.
- 2. Access to technical resources. DIS contracts with two nationally recognized technology research firms to provide agencies with assistance on network issues. Under the agreements, any employee of any governmental organization within the boundaries of Washington State may call experts and receive advice, information, or research on particular technology issues, at no cost to the caller. DIS purchases subscriptions for several subject areas for this advisory service, including one called Global Networking Strategies Service.

To assist agencies in locating other contract resources, PRD maintains a vendor list by commodity code which includes categories for network services.

- 3. <u>Seminars, forums, presentations by experts.</u> In the past year, PRD has sponsored a number of presentations on networking:
  - A February 1995 seminar on network organizational issues, network management, and systems management attended by representatives of several state agencies.
  - A discussion session in March 1995 on Internet applications, security, connectivity, LAN strategies and products; and network management.
  - A discussion of the lack of integrated operations management as a barrier to the implementation of mission-critical business technology applications and infrastructure, in April 1995.
  - Presentations on LAN administration and user support in April 1995.
- 4. Policy leadership. The primary network planning role of PRD and the ISB is creation of technical standards and guidelines that implement the statewide strategic plan's goals. Several standards have been promulgated, including: internetworking; building wiring, cabling and administration; electronic mail transport protocol; Multipurpose Internet Mail Extension (MIME); file transfer protocol; remote applications (Telnet, TN3270); transmission control (TCP); and local area network topology.

DIS' services divisions (as contrasted with PRD, the subject of this recommendation) offer technical support to agencies as they build and interconnect networks. LANs and electronic mail systems. The Telecommunication Services Division provides agencies with network engineering and consultation on implementation. Agencies may also seek support from outside vendors and consultants.

### "Recommendation 2

The legislature should amend RCW 43.105.052 to give the Policy and Regulation Division of DIS statutory authority to enter into master personal service agreements with individuals or firms with proven expertise in areas of information technology, including networking."

Response

DIS disagrees with this recommendation. Central oversight of personal services contracting by the Office of Financial Management (OFM) promotes accountability and careful scrutiny of consulting contracts. Creation of a separate statutory authority for these contracts would diffuse accountability and further complicate an already complex scheme of procurement regulations.

#### "Recommendation 3

The ISB should review and clarify the applicability of policies and standards to computer networks."

### Response

DIS concurs.

### "Recommendation 4

The legislature should amend Chapter 43.105 RCW to provide clear authority for ISB oversight over major information technology projects."

### Response

DIS concurs. RCW 43.105.190 places responsibility for establishing standards and policies governing major information technology projects with the department "with approval of the board." This does not clearly delineate the role of the ISB in project oversight. The language of this section should be revised to indicate that the ISB is responsible for project oversight, and to define project oversight duties to include: regular and objective assessment of performance, conditions, risks and controls related to project scope, schedule, costs and benefits.

The ultimate project oversight act is termination, which can presently occur in three ways:

- · through legislative action;
- through a finding by the director of DIS that the project "is not meeting or is not expected to meet anticipated performance standards" (RCW 43.105.190(1)(b)); or
- through invocation of a project agreement's termination clause, due to failure to perform obligations of the agreement, at the initiation of the DIS or OFM director.

These mechanisms are sufficient to prevent continuing expenditure on unsuccessful projects.

#### "Recommendation 5

The legislature should amend RCW 43.105 to improve the process for evaluating agency budget requests for information technology projects. The legislature should require the evaluation process to include the following components:

- The DIS Policy and Regulation Division and OFM should institute a coordinated process for evaluating agency budget requests for information technology projects costing more than \$500,000.
- Requests for funding should be considered as proposed investments by the taxpayers
  of the state.
- The evaluation of funding requests should include a consistent methodology for weighting the various evaluation criteria in order to provide a comparison of the relative merits of proposed projects.
- An appropriate measure of return on investment, generated from the required costbenefit analysis, should be an important criterion for evaluating proposed projects, but other statutorily mandated criteria should also be used.
- The proposing agency should quantify the life-cycle costs and benefits of alternatives to the proposed project, as well as the proposal itself.
- A summary of the results of the evaluation process that indicates each proposed project's "score" for each of the evaluation criteria, the weighting of each of the evaluation criteria, and the overall project score should be transmitted to the fiscal committees of the legislature."

Response

DIS concurs that proposed information technology projects should be reviewed from the perspective of an investment of state funds. When the return on that investment is not adequate in dollar terms, the burden should be on the project's proponent to show why the project serves the public interest.

While DIS agrees that that projects should be considered as investments, we do not entirely agree with other parts of this recommendation.

The recommendation addresses three distinct concepts: dollar threshold for PRD review of proposed projects; evaluation of financial or quantitative aspects of proposed projects; and evaluation and comparison of qualitative aspects of proposed projects.

<u>Dollar thresholds.</u> At present, PRD review is required when project costs exceed \$3 million or 4% of the agency's budget. Lowering the threshold of PRD review of projects to \$500,000 is unlikely to improve outcomes. Projects at this level are typically routine and low risk. Many in this dollar range are commodity buys, such as purchases of personal computers, which would not benefit from PRD oversight. For \$500,000 projects that pose unusual risk, OFM can, on an exception basis, request PRD review when it would add value.

Decision makers may have a legitimate need for detailed information and recommendations on some projects that fall between the current \$3 million level and the proposed \$500,000 level. When it does not conflict with delegated authority, DIS agrees that it might be reasonable to establish a review level of \$1.5 million in order to ensure that adequate scrutiny is given to these projects, which represent significant investment of public money. In the last biennium, this change would have increased DIS and OFM workloads by six project reviews. This is less problematic than lowering the bar to \$500,000, which would have resulted in an additional 19 project reviews.

Quantitative analysis of proposed projects. The report recommends adoption of more rigorous methods of evaluating financial impacts of proposed information technology projects through considering them as investments by the taxpayers, measuring return on the investments, and quantifying life-cycle costs and benefits of alternatives to the proposals under evaluation. DIS concurs that these types of analysis should be incorporated into the process OFM and DIS use to arrive at funding recommendations. The present process requires feasibility studies and preparation of cost-benefit analyses. High-level cost-benefit analyses are completed for each alternative under consideration, and after selection of a single alternative that will be pursued, a more detailed cost-benefit analysis is conducted. This process should be strengthened and its results better communicated to interested stakeholders.

Qualitative analysis and comparison of proposed projects. The remainder of the recommendation calls for DIS to compare the relative merits of projects and "score" them against one another as they compete for funds in the legislative arena. DIS does not believe that this would be consistent with its role.

The DIS role is to evaluate information technology proposals in order to supply decision makers in the legislative and executive branches with responsible assessments of the technical and business aspects of projects, answering such questions as: Is the proposed project based on sound technology? Is the cost reasonable? Is it consistent with the state's strategic information technology plan? Is it thoughtfully planned? Although these are appropriate questions to pose to technology professionals, DIS should not be charged with administering a weighted formula that could decide how the state's scarce resources will be invested among various programs with different missions.

### "Recommendation 6

DIS, OFM, and the other state agencies should make a more concerted effort to resolve project issues and execute a project agreement within the time frame specified in ISB standards. If satisfactory progress is not made toward resolution of project issues within this time frame, OFM should consider requesting the agency suspend further expenditures until the issues are resolved."

Response

DIS concurs with the recommendation. However, as the report indicates, the state of Washington has a better success record for developing and implementing information technology projects than either the private sector or other governmental organizations. While project agreements are important, there is no demonstrated cause-effect relationship between prompt execution of the agreements and quality project management.

#### "Recommendation 7

When changes to a project result in a requirement for an amended project agreement, DIS and OFM should collaborate to re-evaluate whether the project continues to be justified. The re-evaluation of project justification should utilize the same process and criteria used in the evaluation of agency budget requests for information technology projects."

Response

DIS concurs. The standard project agreement addresses scope, schedule, cost, benefits, and assumptions of the project. The current process requires amendment of the agreement when scope changes significantly, when a new agency head is appointed, or when a variance of ten percent (or a negotiated percentage defined in the agreement) affects scheduled completion date, total development cost, total net cash flow, net present value or any other key components identified in the agreement.

Project justification is re-evaluated as a part of the amendment process. Additionally, a new cost-benefit analysis is prepared if costs, benefits, or schedule change.

#### "Recommendation 8

The legislature should reauthorize DIS and ISB (subject to the modifications recommended in this report) by repealing RCW 43.131.353 and RCW 43.131.354 (Sunset Act sections which terminate DIS and ISB)."

### Response

DIS concurs with the recommendation that the sunset provisions should be repealed, and that the department should be re-established indefinitely rather than for a specified period, as provided in RCW 43.131.040.

### "Recommendation 9

The legislature should consider adding to the ISB private sector representatives who are experienced in the management of information technology."

### Response

The ISB concurs with the recommendation that more than one private sector board member is desirable. The report states at page I "the statute does not allow for more than two private sector members." This is inaccurate. RCW 43.105.032 allows up to four private sector members. Two of the nine ISB members are appointed by the legislative and judicial branches of government. The Governor appoints seven, and of those seven, three are mandated in legislation to be a higher education representative, a representative of an agency under a statewide elected official and a private sector member. The remaining four positions can be filled by private sector members at the Governor's discretion.

Governor Lowry appointed a second private sector member to the ISB in June 1995.

### "Recommendation 10

The legislature should consider separating the planning/policy/oversight function of DIS from its services function. This could be accomplished by separating the Policy and Regulation Division from DIS services and creating an independent staff to ISB."

#### Response

The question of collocating the policy and services components of DIS is a significant one, deserving careful analysis and full discussion by all concerned stakeholders.

The sunset review provides an opportunity to closely examine the structure of DIS and to determine how the state should best organize information technology to support services to citizens in the 21st Century. The Administration plans to engage in a thoughtful investigation of the alternatives available and to come forward with a proposal. It would be premature to commit to a major split in the organization without a detailed examination of the likely consequences of such a substantial change.

The authors of the sunset review appear uncertain that separation of the policy from the services components of the department would necessarily achieve any meaningful

objective. The primary reason for considering the separation is to avoid the possibility of conflicts between services and policy. Yet, the report states: "We were able to find little direct evidence that the potential for conflict has, in fact, been realized" and "We do not consider the evidence identified above [in the report] as conclusive that the potential conflict between the major roles of DIS creates substantial problems" and "...this situation may be quite subtle and difficult to prove." In fact, history reveals no instances of actual conflicts between these roles.

Ultimately, the recommendation relies on the secondary argument of "greater independence of the ISB." The ISB's predecessor, the Washington State Data Processing Authority, a regulatory board similarly chartered and constituted, existed as a standalone agency with a small support staff. This independent structure proved unsatisfactory and was abandoned in favor of the current one.

The report goes on to mention unresolved issues relating to the "not-for-profit corporation" initiative, and recommends further staff work to resolve them. Whether PRD should be split off from the rest of DIS, and whether the services component should form a nonprofit corporation are interrelated questions that should be considered in the broadest possible context of managing technology to support the delivery of state services.

By January 1996, DIS and OFM propose to bring forward the outcome of a review that addresses the provision of information services, the development of information policy and the oversight of projects, based on careful analysis and thorough discussion among interested stakeholders.



#### STATE OF WASHINGTON

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September 22, 1995

Cheryle A. Broom, Legislative Auditor Legislative Budget Committee 506 East 16th Street P.O. Box 40910 Olympia, Washington 98504-0910 RECEIVED

SEP 22 1995 LEGISLATIVE BUDGET COMM

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Dear Ms. Broom:

Thank you for the opportunity to respond to the draft sunset review of the Department of Information Services (DIS) and the Information Services Board (ISB). The Office of Financial Management (OFM) plays an integral role in the evaluation and oversight of major information technology projects, and several of the Legislative Budget Committee's (LBC) audit team's recommendations involve OFM. Therefore, this response addresses two themes: 1) The audit team's assessment of the performance and functions of DIS; and 2) our response to the recommendations that relate to OFM.

OFM concurs with LBC's favorable assessment of the Department and Board. The LBC audit team reports that "the services and functions provided by DIS and ISB are necessary, apparently cost-effective, and should continue" through reauthorization of the Department and Board and repeal of the sunset provisions (RCW 43.131.353 and 43.131.354). The report also finds that "DIS customers are, in general, pleased with the quality of service provided." The team identifies areas for improvement, namely the process for evaluating proposed information technology projects, the oversight of funded projects, and the services available to state agencies to assist them in planning and implementing computer networks. However, the report finds that Washington State's track record on project oversight compares favorably with private and public sector experience nationwide.

Enclosed is OFM's detailed response to the LBC recommendations. We are in concurrence with the majority of these recommendations, disagreeing only as to the best way to achieve the goals expressed in Recommendations #2 and #5. These are the recommendations that most directly concern OFM duties and functions, namely oversight of personal services contracts and the assessment of proposed information technology projects as investments of public dollars. OFM agrees with the aim of these recommendations, but proposes alternative means of achieving them consistent with statutory requirements and other factors.

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Cheryle A. Broom, Legislative Auditor September 22, 1995 Page Two

OFM appreciates the work of the LBC audit team, and welcomes the opportunity to benefit from the LBC's research and recommendations for improvement. We look forward to working with the Department and Board to implement these recommendations, and would be happy to answer any further questions the Committee might have.

Sincerely,

Ruta Fanning

Director

# Summary of OFM Response to LBC Preliminary Report: DIS/ISB Sunset Review

Recommendation	OFM Position	Comments
The Policy and Regulation Division of DIS should explore methods of providing further assistance to agencies in planning and implementing computer networks.	Concur	
2. The legislature should amend RCW 43.105.052 to give the Policy and Regulation Division of DIS statutory authority to enter into master personal service agreements with individuals or firms of proven expertise in areas of information technology, including networking.	Disagree	Statute was amended in 1993 to strengthen scrutiny of personal services contracts, and the current OFM review and approval is necessary to ensure public accountability.
3. The ISB should review and clarify the applicability of policies and standards to computer networks.	Concur	
4. The legislature should amend Chapter 43.105 to provide clear authority for ISB oversight over major information technology projects.	Concur	Statute should clarify existing functions of ISB, but not change the process for terminating major projects.
5. The legislature should amend RCW 43.105 to improve the process for evaluating legislative budget requests for information technology projects.	Partially concur	OFM concurs with three of six specific recommendations, partially concurs with one, and does not concur with two. See detailed response.
6. DIS, OFM, and the other state agencies should make a more concerted effort to resolve project issues and execute a project agreement within the time frame specified in ISB standards. If satisfactory progress is not made toward resolution of project management issues within this time frame, OFM should consider requesting the agency suspend further expenditures until these issues are resolved.	Concur	
7. When changes to a project result in a requirement for an amended project agreement, DIS and OFM should collaborate to re-evaluate whether the project continues to be justified. The re-evaluation of project justification should utilize the same process and criteria used in the evaluation of agency budget requests for information technology projects.	Concur	
8. The legislature should reauthorize DIS and ISB (subject to the modifications recommended in this report) by repealing RCW 43.131.353 and RCW 43.131.354 (Sunset Act sections which terminate DIS and ISB).	Concur	
9. The legislature should consider adding to the ISB private sector representatives who are experienced in the management of information technology.	Concur	Current statute provides authority for the Governor to appoint up to four private-sector representatives. Two currently serve.
10. The legislature should consider separating the planning/policy/oversight function of DIS from its services function.	Tentatively concur	OFM will work with DIS to thoroughly review this and other questions of agency function and organization.

# Detailed OFM Response to LBC Preliminary Report: DIS/ISB Sunset Review

Recommendation 1: "The Policy and Regulation Division of DIS should explore methods of providing further assistance to agencies in planning and implementing computer networks." OFM concurs that agencies' unmet needs for assistance with planning and implementing local-area networks should be addressed. OFM will work with DIS to ensure that agencies are aware of those resources that are available through DIS, and to explore other means of assisting agencies, including standards and guidelines for networks, and model contracts for services.

Recommendation 2: "The legislature should amend RCW 43.105.052 to give the Policy and Regulation Division of DIS statutory authority to enter into master personal service agreements with individuals or firms of proven expertise in areas of information technology, including networking."

OFM disagrees with this recommendation. In recent years, the Legislature and the public have expressed particular concern about the potential abuse of the process of state contracting for personal services. Chapter 39.29 RCW, which governs personal services contracts, was amended in 1993 to increase accountability and public scrutiny. OFM is required in Chapter 39.29 RCW to approve certain personal services contracts, and to maintain a publicly available list of all personal service contracts entered into by state agencies during each fiscal year. There is no precedent for exempting an agency from the review and approval required under this chapter. An alternative approach would be to provide model contracts that could be used by agencies to streamline the contract process. OFM has established an interagency team, with the participation of DIS, to work on improvements to the contract process.

Recommendation 3: "The ISB should review and clarify the applicability of policies and standards to computer networks."

OFM concurs.

Recommendation 4: "The legislature should amend Chapter 43.105 to provide clear authority for ISB oversight over major information technology projects."

OFM concurs, assuming that this amendment clarifies in statute the existing role of the Board, without changing the process by which projects can be terminated.

Recommendation 5: "The legislature should amend RCW 43.105 to improve the process for evaluating legislative budget requests for information technology projects. The legislature should require the evaluation process to include the following components:

 The DIS Policy and Regulation Division and OFM should institute a coordinated process for evaluating agency budget requests for information technology projects costing more than \$500,000.

OFM partially concurs. This recommendation would expand the definition of "major projects" mandatorily reviewed under RCW 43.105.190 to capture the lower-cost, incremental projects that are likely to become more common in the future, as the state turns from large mainframe projects to distributed processing environments. However, the proposed \$500,000 threshold would increase the workload within PRD (and OFM), such that the costs of mandatory review of all projects costing more than \$500,000 would likely outweigh the benefits and strain existing staff resources. A low dollar threshold does not distinguish high-risk projects such as software development from low-risk, routine acquisitions. One alternative would be to lower the threshold to \$1.5 million, which would still widen the range of projects brought under mandatory review without involving numerous low-risk projects (such as hardware acquisitions). OFM notes that riskier projects such as software development can currently be brought under review, either at OFM request under RCW 43.105.180, or by the Legislature subjecting the project to oversight under Section 902 of the Biennial Appropriations Act.

- Requests for funding should be considered as proposed investments by the taxpayers of the state.
  - OFM concurs.
- The evaluation of funding requests should include a consistent methodology for weighting the various evaluation criteria in order to provide a comparison of the relative merits of proposed projects.

OFM disagrees with this recommendation, insofar as it would mandate a relative scoring system (i.e. "grading on the curve"). The "relative merits of proposed projects" necessarily include subjective elements, including the relative value assigned to each agency's functions associated with the proposed projects. Comparing the relative merits of alternatives to a proposed project is appropriate, but comparisons between different projects are less meaningful from an objective, budgetary perspective. Often funded by separate sources, few major projects are directly competing for funds. OFM concurs that agencies should comply with existing and new requirements to quantify expected benefits, and will continue to work with DIS and with the proposing agencies to obtain the best possible data on the feasibility and merits of a proposed project.

- An appropriate measure of return on investment, generated from the required cost-benefit analysis, should be an important criterion for evaluating proposed projects, but other statutorily-mandated criteria should also be used.
  - OFM concurs. The concept of return on investment assists OFM in evaluating proposed projects as investments of public funds. Current requirements for a feasibility study include "quantitative tangible expected benefits from the project" and net present value, or the effect of the projected costs and benefits stated in present-year dollars.
- The proposing agency should quantify the life cycle costs and benefits of alternatives to
  the proposed project, as well as the proposal itself.
   OFM concurs. Current requirements for a feasibility study include at least three major
  alternatives to the proposed project, with the reason each alternative was rejected.
- A summary of the results of the evaluation process that indicates each proposed project's
  'score' for each of the evaluation criteria, the weighting of each of the evaluation criteria,
  and the overall project score should be transmitted to the fiscal committees of the
  legislature."
  - OFM disagrees, for reasons specified under the third bullet above.

Recommendation 6: "DIS, OFM, and the other state agencies should make a more concerted effort to resolve project issues and execute a project agreement within the time frame specified in ISB standards. If satisfactory progress is not made toward resolution of project management issues within this time frame, OFM should consider requesting the agency suspend further expenditures until these issues are resolved."

OFM concurs.

Recommendation 7: "When changes to a project result in a requirement for an amended project agreement, DIS and OFM should collaborate to re-evaluate whether the project continues to be justified. The re-evaluation of project justification should utilize the same process and criteria used in the evaluation of agency budget requests for information technology projects."

OFM concurs with this recommendation, and notes that it is current practice for DIS and OFM to collaborate to re-evaluate the justification of projects when the project agreement is amended, using the same process and criteria used to evaluate the initial agency budget request.

Recommendation 8: "The legislature should reauthorize DIS and ISB (subject to the modifications recommended in this report) by repealing RCW 43.131.353 and RCW 43.131.354 (Sunset Act sections which terminate DIS and ISB)."

OFM concurs.

Recommendation 9: "The legislature should consider adding to the ISB private sector representatives who are experienced in the management of information technology." OFM concurs that private sector representation is necessary to the Board's mission, and notes that it has been an executive priority in the past year to fill vacancies with private-sector representatives knowledgeable in information technology management. Currently the ninemember Board includes two vacancies and two representatives of the private sector, one of whom was appointed in June 1995. Current statute mandates one but authorizes up to four private sector members, at the Governor's discretion (RCW 43.105.032).

Recommendation 10: "The legislature should consider separating the planning/policy/oversight function of DIS from its services function. This could be accomplished by separating the Policy and Regulation Division from DIS services and creating an independent staff to ISB."

OFM concurs that the Legislature should *consider* the issue of where best to place the planning/policy/oversight function currently housed in DIS's Policy and Regulation Division. OFM recognizes that the sunset review presents an opportunity for a broad review of the Department's functions and organizational structure, as well as the state's long-term information technology needs. OFM will work collaboratively with DIS and major stakeholders to engage in a review of these and related issues, and will report to the Governor and Legislature by January 1996.

### **AUDITORS' COMMENTS**

Both DIS and OFM concurred with seven of the ten LBC recommendations, partially concurred with two of the recommendations, and disagreed with one of the recommendations. The full text of the DIS and OFM responses are included earlier in this appendix. The auditors' comments below respond to the three recommendations with which there was not full concurrence by DIS and OFM.

### Recommendation 2

The legislature should amend RCW 43.105.052 to give the Policy and Regulation Division of DIS statutory authority to enter into master personal service contracts with individuals or firms with proven expertise in areas of information technology, including networking.

Synopsis of DIS and OFM Response

Creation of a separate statutory authority for these contracts would diffuse accountability and further complicate an already complex scheme of procurement regulations.

### **Auditors' Comment**

The intent of this recommendation is to save time and money by enabling agencies to retain networking consultants from a DIS master contract instead of having each agency conduct its own competitive bidding process. DIS would still provide accountability by conducting a competitive bidding process to develop the master contracts. This recommendation was originally suggested by DIS to the LBC. Now, after discussions between DIS and OFM, it appears both agencies agree that the master contracts proposed in this recommendation would provide less accountability over the selection of consultants. Therefore, DIS and OFM do not concur with the recommendation. Because the agencies that would have to implement this recommendation are not inclined to utilize this authority, we suggest the LBC consider deleting this recommendation from the final report.

### Recommendation 5

(Note: Recommendation 5 includes a general recommendation and six bullets. A synopsis of the DIS and OFM response to each of these bullets, and the auditors' comments are provided below.)

The legislature should amend RCW 43.105 to improve the process for evaluating agency budget requests for information technology projects. The legislature should require the evaluation process to include the following components:

### Recommendation 5, 1st bullet

• The DIS Policy and Regulation Division and OFM should institute a coordinated process for evaluating agency budget requests for information technology projects costing more than \$1,500,000.

Synopsis of DIS and OFM Response

Lowering the threshold to \$1.5 million would widen the range of projects brought under mandatory review without involving numerous low-risk projects.

### Auditors' Comment

This recommendation would lower the threshold for DIS review of proposed projects from \$3 million to \$500,000. DIS and OFM suggest that \$1.5 million is a more appropriate threshold for review of proposed projects. Based on DIS and OFM's comments, we concur that \$1.5 million is an appropriate threshold for the review of agency budget requests and have revised the recommendation accordingly.

# Recommendation 5, 2nd bullet

• Requests for funding should be considered as proposed investments by taxpayers of the state.

Synopsis of DIS and OFM Response

DIS and OFM concurred with this portion of the recommendation.

# Recommendation 5, 3rd bullet

 The evaluation of funding requests should include a consistent methodology for weighting the various evaluation criteria in order to provide a comparison of the relative merits of proposed projects.

### Synopsis of DIS and OFM Response

DIS states that "DIS should not be charged with administering a weighted formula that could decide how the state's scarce resources will be invested among various programs with different missions." OFM states that ". . . comparisons between different projects are less meaningful from an objective, budgetary perspective. Often funded by separate sources, few major projects are directly competing for funds."

### **Auditors' Comment**

Weighting of project evaluation criteria and scoring of projects is not intended to determine which projects will be funded (e.g., only the projects with the highest scores are funded), as is suggested by both DIS and OFM. We recognize that projects are funded by different sources and may not directly compete for funding. The intent of scoring projects is to provide an incentive for agencies to quantify project benefits and to allow relative comparisons, not to develop funding priorities. We are not suggesting that only projects which receive a certain score be funded.

Because projects are not scored under the current evaluation process, there is little incentive for the proposing agency to quantify project benefits. As pointed out in the report, there are several projects that have been funded without quantified benefits. In fact, because agencies do not have to quantify benefits in order to be funded, the current evaluation process discourages agencies from quantifying the benefits of projects. This occurs because agencies perceive that OFM or the legislature will "realize" project benefits through budget reductions.

The report also points out that in some instances, there may be a clear public policy purpose for pursuing a project that has few quantifiable benefits. Because the benefits of the project are difficult to quantify, the project may not receive a high score for the investment-related criteria in the evaluation process. A low score on the investment-related criteria would not necessarily eliminate a project from consideration for funding. A low score on the investment-related criteria could be offset by higher scores on other criteria. It may also place more of a burden on the proposing agency to clearly demonstrate the public policy purpose or other benefits of the project in order to justify to the governor and legislature why it should be funded.

# Recommendation 5, 4th bullet

 An appropriate measure of return on investment, generated from the required cost-benefit analysis, should be an important criterion for evaluating proposed projects, but other statutorily-mandated criteria should also be used.

Synopsis of DIS and OFM Response

DIS and OFM concurred with this portion of the recommendation.

# Recommendation 5, 5th bullet

 The proposing agency should quantify the life cycle costs and benefits of alternatives to the proposed project, as well as the project itself.

Synopsis of DIS and OFM Response

DIS and OFM concurred with this portion of the recommendation.

# Recommendation 5, 6th bullet

 A summary of the results of the evaluation process that indicates each proposed project's 'score' for each of the evaluation criteria, the weighting of each of the evaluation criteria, and the overall project score should be transmitted to the fiscal committees of the legislature.

Synopsis of DIS and OFM Response

DIS and OFM did not concur with this portion of the recommendation, because, as was discussed previously, DIS and OFM do not agree that proposed projects should be 'scored' using quantified evaluation criteria.

### **Auditor's Comment**

Our comments regarding the scoring of projects are provided above.

### Recommendation 10

The legislature should consider separating the planning/policy/ oversight function of DIS from its services function. This could be accomplished by separating the Policy and Regulation Division of from DIS services and creating an independent staff to the ISB. Synopsis of DIS and OFM response

DIS and OFM concurred that the idea of separating the Policy and Regulation Division from DIS services should be considered. DIS and OFM propose to provide a report by January 1996 that considers this issue.

### **Auditor's Comment**

The DIS and OFM report should provide additional information to the legislature in their consideration of this issue.